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Thus it will be seen that if man has passions which impel him to the destruction of man, if he be the only animal who, despising his natural means of attack and defence, has devised new means of destruction, he is also the only animal who has the desire, or the power, to relieve the sufferings of his fellow citizens, and in whom the co-existence of reason and benevolence attests a moral as well as an intellectual superiority.—GRAVES' CLINICAL MEDICINE.

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GUN-SHOT WOUND OF THE SPINE—WOUND INVOLVING THE ATLAS AND AXIS.

BY S. C. THOMAS, M. D., MILROY, IND.

(Read before the Rush County Medical Society, and published by request of the Society.)

July 12, 1868, 4 o'clock P. M.—I was summoned in haste to see Mrs. Ann B——, who had been accidentally shot by her husband, with a very small vest-pocket pistol, with which was used conical ball-cartridges.

After examination, I found the ball had entered beneath the inferior maxillary bone, two inches to the right of the symphysis mentis, ranging upward and backward, entering the upper and right side of the fauces, immediately behind the "velum pendulum palati."

Hemorrhage was quite profuse from the mouth and right nostril for a very few minutes, after which it almost entirely ceased, and we had no further difficulty from that source until some thirty-six hours before death.

When I first saw patient her mental condition was good. Nervous system but little disturbed. No acceleration of the pulse. Respiration normal. Articulation of sounds and deglutition attended with much difficulty and pain.

TREATMENT.—Cold water dressings to chin and neck, and anodynes sufficient to control pain.

July 13.—Seventeen hours after accident. I found patient feeling very uncomfortable, on account of augmented inflammation, and swelling of the chin and the right side of the fauces. Complains of pain in back portion of head and neck, and also that she is incapable of otating the head. Respiration and *circulation* but slightly changed. Deglutition less troublesome. Swallows fluids very well. Articulation of sounds much the same.

TREATMENT—Continued, with the addition of the sulphate of magnesia to move the bowels.

July 14.—Patient complains of increased pain in posterior portion of the head and neck, and also of extreme soreness at the junction of the spine and cranium. Slight photophobia. Inflammation and swelling increased, and suppuration set up in the right side of the fauces. Muscles of the right side of the neck very sensitive to the touch. Bowels not moved. Other symptoms much as they were before.

TREATMENT.—Ordered sulphate magnesia to be repeated every three hours, until free catharsis shall be obtained.

July 15.—Says she feels better, and that the pain in the posterior portion of the head and neck has subsided. Stiffness and soreness of the neck still continue. Bowels freely moved.

July 15, midnight.—Patient grew suddenly worse. Pain in posterior portion of the head and neck greatly augmented. Excruciating pain in front portion of the head. Much intolerance of light. Had a very severe and protracted rigor,—lasted about three hours; after which complete reaction came up. The wound in the fauces ceased to uppurate for six hours, after which it threw off more than at any time previous.

July 16, 9 A. M.—Pulse feeble and quick. Respiration labored and rapid. Deglutition again attended with pain. Severe pain in back portion of head and neck, with increased stiffness of the latter. Increased soreness of the muscles of the right half of the cervical region. Profuse perspiration. A painful condition of the muscles throughout the whole system. Congestion of the conjunctivæ; but less intolerance of light than through the night. Increased swelling of the right and posterior fauces. Persistent nausea. Within twenty-four hours, four large and offensive stools. Exhibits unusual anxiety.

TREATMENT.—Wine, quinine, chlorate potash and sulph. morphine.

July 16, 6 o'clock P. M.—Met Dr. M. Sexton, who was called to visit patient. We found patient better than in the morning. Has had four rigors since midnight; the last one only lasting some twenty minutes. Circulation one hundred and twenty; respiration twenty-four. Heavy, muddy coat upon the tongue.

Swallows much better. Has taken solid food without anything to moisten it. Appetite better than at time of morning visit.

TREATMENT—Continued.

July 17, 9 A. M.—Respiration eighteen, and circulation one hundred per minute. Pain in the extremities has subsided. Pain and soreness at the junction of the spine and the cranium unchanged. Less congestion of the conjunctivæ, and, also, less photophobia than for three days. Secretion of pus large and very offensive; it often excites vomiting as it passes through the mouth. In other respects patient much better.

TREATMENT—Continued.

July 18, 9 A. M.—Circulation one hundred; respiration increased in frequency, and attended with pain in upper portion of the chest. Swallows well any kind of food. Less inflammation of the fauces; notwithstanding patient complains of pain in that region all of the time.

Pain in the back portion of head and neck increased within twenty-four hours. Stiffness of the neck and shoulders is giving much distress. Does not breathe through the nostrils, but alone through the mouth. Breathing loudly stertorous during sleep. During sleep the expired air leaves the mouth as if blown out, as in smoking. A tetanic condition of all the muscles. A slight noise disturbs the patient much, although she is rational and conscious all of the time.

Extremities covered with a cold, clammy sweat. Increased photophobia, and congestion of the conjunctivæ. Sleeps with eyes nearly open. Takes but little food, and there is an increase of thirst.

TREATMENT.—Ordered the bowels moved, and the other treatment continued as before.

July 19, 10 A. M.—Patient is feeble; but in every other respect she is much better.

TREATMENT.—Increase the dose of tonics and stimulants.

July 20, 9 A. M.—Pain in back portion of head and neck very great through the night, but slightly better this morning. Complains of dimness of vision. Muscæ volitantes, and roaring in the ears. Photophobia increased. More swelling of the right side of the fauces and uvula. Large secretion of pus by internal wound. Can swallow

fluids well, but solids not at all. Increased thirst. Bowels very free in their action. A severe and protracted rigor during the night.

TREATMENT—Continued, with the addition of an astringent for bowels.

July 21, 9 o'clock A. M.—Much improved in almost every respect. If it were not for stiffness of the neck, we would conclude that our patient was fast approaching cure; for at every other point there has been a marked change for the better.

July 23, 10 A. M.—Rested badly during the night, notwithstanding she was doing quite well previous to that time. Had a severe rigor at two o'clock A. M.; and after reaction was set up, she had very high fever, which still continues. Bowels very active, and the stools large and offensive. No appetite for anything. Tongue covered with a heavy brown coating. Circulation feeble and frequent. External wound entirely healed, and swelling and inflammation of the fauces greatly reduced.

TREATMENT.—Gave full doses of quinia, chlo. potash, per. sulph. iron, and wine. Anodynes, to be used as occasion may require.

July 24, 11 A. M.—Case unchanged since yesterday, except the diarrhœa, which is now somewhat controlled.

TREATMENT—Continued.

July 25, 10 A. M.—Patient sleeps with eyes wide open, and the eyeballs continually in motion. Froth and mucus forced out of the mouth at every expiration during the most profound sleep. Other symptoms unchanged.

TREATMENT—The same.

July 26, 11 A. M.—Patient much better. Circulation eighty-five, and full. Respiration sixteen, and easy. Skin soft, moist and warm. Suffers no pain, except when she attempts to move the head. Swallows food without any trouble. Very little redness or swelling about the fauces. Suppuration profuse and offensive, and of a dark yellow color. Appetite improved. No thirst. Eyes less open, and no motion of the eyeballs during sleep. No frothing, nor any other disturbance of the mouth during sleep.

TREATMENT.—Supporting.

July 27 and 28.—Improvement continues in every respect except the stiffness of the neck. Able to rise up and remain for a considerable time without fatigue.

July 29, 11 A. M.—Patient has been resting quietly since last seen. Circulation and respiration normal. Discharge of pus from fauces

still large and offensive. Pain has entirely subsided, and but slight soreness remains in the cervical region. Bowels rather free. Appetite good.

TREATMENT.—Stimulants, tonics and astringents.

July 30.—Patient still improving.

July 31.—Walked across the floor, and took her meals with family at the table, and does not suffer any inconvenience from any cause, except stiffness of the neck.

From this time until August eighth, patient steadily improved in strength and ability to walk. Could not rotate head, and when she attempted it, increased soreness of the cervical muscles was the consequence. After she was able to walk about, she would occasionally have a rigor, (never lasting over a few minutes), whenever excited or fatigued from any cause.

She performed manual labor of the lighter kinds for a few days, and did not seem to suffer any inconvenience from it. I am told that she spun or twisted yarn at the big wheel for a part of one day, and that it resulted in nothing more than slight fatigue.

August 8, 8 o'clock A. M.—Patient feeling as well as she had for days, walking over the yard, and, without any apparent cause, fell, but quickly got up again without any assistance. She stated that she knew no reason why she fell, except the sudden giving way of the muscles.

At twelve o'clock M., she was seized with a severe lancinating pain beneath the right mammary gland, which continued gradually increasing until four o'clock P. M., when she coughed, and at the same time felt something give way at the seat of pain. Complained that the chest felt full and hot, and that the breathing was difficult; after which came profuse hemorrhage from the mouth. Judging from the general appearance, and the amount that could be collected, I think the patient lost one quart of blood.

When I first saw patient, she was pale and apprehensive; circulation one hundred and forty and feeble, respiration twenty-eight and labored. Examination of the chest revealed the fact that the bronchial tubes were filled with a fluid. Bronchial rales could be heard all over the chest. Pain in back portion of head and neck excruciating. Increased thirst. Appetite gone. During the day she had three paroxysms of hemorrhage, but the amount of blood lost was small.

TREATMENT.—Stimulants, tonics and anodynes, to be given freely.

August 9, 9 A. M.—Patient more feeble. Portions of the lungs not expanded this morning. Pain in head and neck much the same as yesterday. Has occasional rigors, but they are not severe nor long.

TREATMENT—Continued.

August 10.—One paroxysm of hemorrhage during the night. Rapidly failed in strength, until death closed the scene, at eight o'clock A. M.

Post mortem examination, held at two o'clock P. M., six hours after death. Drs. F. M. and P. M. Pollitt gave kindly and efficient assistance during the examination.

Symptoms during life led to the examination of the lungs first. Lower and a portion of the upper lobes of the lung were largely congested. By cutting into the lung structure, we found isolated patches of miliary tubercles and the air-cells filled with extravasated blood, which flowed freely as soon as the incision was made. The bronchial tubes were healthy, and the right were filled with blood. Being satisfied with our examination of the viscera of the chest, we next turned our attention to the wound. The wound, from the entrance of the ball to the point where it passed into the fauces, seemed to be thoroughly healed, and almost all trace of it obliterated.

The ball passed through the fauces, impinging heavily upon the anterior arch of the axis, in close proximity to its junction with the atlas, producing a radiated or comminuted fracture. The soft parts at and in the immediate vicinity of the injury were in a suppurative condition, and had a dark and gangrenous appearance, emitting a very disagreeable and offensive odor.

After careful examination of the wound, we discovered small pieces of bone, which were easily removed with the fingers. Notwithstanding we made strict and minute search, we were unable to find the ball. The anterior articulating surfaces, as well as the ligaments connecting the anterior portions of the axis and atlas, were entirely destroyed, and the odontoid process detached so that it could be easily removed.

The theca vertebralis was in a softened and almost disorganized condition, so much so, indeed, that its continuity of structure was easily destroyed by our manipulations, in connection with our examination of the parts. The medullary matter for an inch each way, in the spinal canal, from the opening in the spinal column, was largely mingled with dark, grumous blood. The connection between the axis and the atlas was so fragile that the weight of the head, when thrown backward, destroyed it.

We were unable to say that the hemorrhage immediately preceding death came from the wound, because there were no important blood-vessels in the line of injury, and, also, in consideration of the fact that there was strong evidence, before and after death, that it might have come from the lungs.

EPILEPSY—A REPORT OF FOUR CASES, WITH TREATMENT, FROM MY NOTE-BOOK; ALSO, SOME REMARKS AND OPINIONS UPON THE PROGNOSIS, AND STUDY OF THIS SAD DISEASE.

BY WAYNE GRISWOLD, M. D., CIRCLEVILLE, OHIO.

CASE I.—J. D——, boy five years old. First called to the case, February 4th, 1867. Well developed; nervo-bilious temperament; dark hair and eyes, but dull and downcast in look; like most epileptics, inclined to be silent, morose, petulant, and excitable; occasionally complains of pain in back part of head; respiration and circulation natural; bowels regular; appetite good; inclines to run and play as usual.

Had enjoyed good health up to last July, when, after playing in the hot sun for some time, he went into the cellar kitchen and laid down upon the damp brick floor, fell into a sleep, took a congestive chill, followed by fever, producing a violent epileptic convulsion. From that time up to February 4th, the boy had a return of the paroxysm every four to six weeks, usually in the night.

The parents were deeply anxious about the child, and very solicitous to know if he could be cured. I gave them to understand that I should have great hope, if they would follow a prescription for ten to fifteen months. I make it an invariable rule to make no prescription for a chronic case of epilepsy requiring medication, unless they will follow the directions from ten months to two years. Trousseau never uttered a greater truth than when he said, "chronic diseases require chronic treatment," and it is particularly so in epilepsy.

I could not discover any organic lesion in the case; no hereditary taint; no trouble with teeth, worms, kidneys, bladder, sexual organs or bowels. My theory of the case was, that some congestion or irritation of the medulla oblongata had remained from the severe attack

in July, and that occasional excitement from deep sleep, produced sudden contraction of the vaso-motor nerves of the encephalon and its meninges, followed by anemia of the brain, and the epileptic paroxysm.

PRESCRIPTION.—Good food, free exercise in the open air, with an ocasional warm bath.

℞ Potassii Brom., ʒiii.
Aquæ ℥iv. M., ʒi, ter. die.
Also, rub the back of neck and spine with strong stimulating liniment.

At the end of three weeks, I gave the boy a half grain of valerianate of zinc, three times per day, with the potassium.

The boy had but one paroxysm after the treatment was fairly commenced. This course was followed for nine months, without change, and then gradually slacked off. The boy has been perfectly well ever since.

CASE II.—E. B——, girl, aged five years; nervo-sanguine temperament; light hair and complexion; blue eyes; dull and downcast; mind weak; restless, excitable, petulant and easily irritated. About two years before, this child had a severe sickness. From that time she had epileptic fits, about one a week on an average, usually at night, followed by an involuntary discharge of urine. She had been under treatment by a quack all this time, and was constantly growing worse. I could not discover any local lesion in this case; yet she was weak in body and mind and inclined to be anemic.

Prescribed a generous diet; free exercise in the open air; occasionally warm bathing; keep her as cheerful as possible; let her have a little whisky when there is much weakness or nervous excitement. Gave her five grain doses of bromide potassium at meal time, also half grain val. zinc three times a day.

This treatment was followed for seven months, without change, and then gradually lessened. She had but three paroxysms after the treatment commenced, and has been free to date.

CASE III.—Called December 13th, 1867. A. C——, girl, aged three years and six months; had hooping cough badly when one year old; soon after had spasms from worms and teething; when about two years old she took epileptic fits, generally in the night, occasionally in the day time; had from one to four every twenty-four hours. At present the child has from two to six every twenty-four hours; she is very weak and irritable; staggers when she walks; often falls down;

seems to have but partial control of muscles of the extremities; head inclined to lean forward; downcast look; eyes indicate great vacuity; mind weak; appetite tolerable; respiration and circulation natural but weak; restless, uneasy and excitable; nervous temperament; seemed well nigh destroyed both in body and mind, from the frequent repetition of the paroxysms for the last year.

While looking at the child, and reflecting upon the cause and pathology of the case, I saw her pass her hand under her clothes up to her privates. I called the attention of the mother to the fact, and inquired whether she had seen her do that before. Said she had frequently; but did not know that there was any harm in it. Upon examination, I found this child had fingered and pulled at the vulva, until the vagina, for some distance up, was enlarged enough to enter the end of a full grown thumb.

I never investigate a case of epilepsy, that my suspicions are not turned to the generative organs for a most careful examination, no matter how young or old, unless a positive cause is known. It is astonishing how young children of both sexes are led to self-abuse; and, of all the causes of epilepsy, as far as my observation goes, this is the greatest and worst.

I prescribed for this case with little hope, simply because the mother, while she felt a deep interest for her child, was wholly deficient in the capacity and patient perseverance to manage and nurse the case.

PRESCRIPTION.—Keep her hands from the privates, never let her touch them, if they have to be tied for a year; free nourishing diet; warm bath and exercise in open air.

℞ Belladon. Fld. Ext., gtts. xl.
Potassii Brom., ʒiii.
Aquæ, ℥iv. M. ʒi ter. die.

Also, a one grain pill of iron by hydrogen, at meal time.

Up to January, 1868, the child had about two paroxysms every day; but had improved somewhat in strength. During January, she had only two each week. The mother had kept the child from self-abuse. In February, averaged three fits a week. March 1st, left out the belladonna, continued the bromide, also stopped the iron pills, and gave half grain val. zinc three times a day; child improved both mentally and bodily. This course of medicine was continued, noting the

case carefully up to November, 1868, child having from four to six paroxysms each month. From that date, the parents concluded to stop medicine, as they had so far to come, and the weather became cold. January 1st, 1869, two months after, the child was still improving, and not more than one fit in a week. If this child was so situated that she could have constant care and medical attention for a year more, I should have little doubt of a permanent cure.

Case IV.—Mrs. B——. Called to see her November 11th, 1867. Married, aged thirty-two years; has had two children, one living aged seven; light complexion and hair; gray eyes; spare, sharp features; nervous temperament; excitable, restless, very loquacious; respiration and circulation natural; general health tolerably good; works most of the time; had epilepsy in childhood, and occasionally up to womanhood. The day after the birth of her first child, she had nine severe convulsions, whether eclampsia or epileptic, I could not learn. Since, has had attacks every four or five months, coming on generally in the night while asleep, and occasionally, two or three paroxysms in a single month, generally severe, leaving the patient weak, sore, sometimes bruised, also pain in head, and giddiness.

Prescribed quietude and good nourishment.

℞ Hall's Sol. Strychnia, f ʒ ii.
Potassii Brom., ʒiv.
Aquæ, ℥iv.

Tea-spoonful middle forenoon, middle afternoon, and bed time. Also, gave three grain pill of iron by hydrogen at meal time. This course was pursued carefully up to April, 1868. She had one fit March 3d. On the 1st of May, the pill and strychnia were omitted, she having become pregnant. The potassium was continued in increased doses. She enjoyed good health up to November 11th, when she was delivered of a fine large boy—labour natural, and free from any convulsions. On the 22d, being somewhat exhausted with a bad breast, she had an epileptic fit, the second in a year and twelve days. From this time, I added the iron to the treatment. January 1st, 1869, feels quite well, is nursing her child, and continues treatment.

There was a peculiarity in this case worthy of note. She has a shoulder which has been dislocated probably twenty times, by simply raising the arm and carrying it back; and during the struggle of her last attack, she dislocated the shoulder. The original dislocation was probably produced by the same cause.

I report these cases, not for the purpose of discussing the causes or pathology of epilepsy, or to urge any particular mode of treatment; but to present the simple practical facts, hoping to awake a deeper interest in this sad disease, and to excite the profession to a more devoted and careful study of the causes, pathology, prognosis and treatment of epilepsy. I am fully aware that authors are divided upon the prognosis of this disease; that many eminent men consider epilepsy incurable.

Trousseau tells us, "That in past ages this disease was considered a scourge sent from the Almighty, and that nothing but Providential interference could cure it." "The progress of science," continues this author, "has only slightly altered this state of things, and epilepsy is now a days, generally quite as incurable as formerly."

Prof. Tardieu says: "There are few diseases so severe and so terrible as epilepsy, and that it is nearly always incurable."

M. Romberg expresses faith in the curability of many cases.

M. Herpin of Geneva, in his premium essay from the French Institute, reports fifty cases—one-half cured by medicine.

Althaus, Chambers, Locock who was one of the first to call the attention of the profession to the use of bromide of potassium in epilepsy, and Reynolds, all give us a favorable prognosis, with a hope of cure in numerous cases.

Watson, Barlow, Aitken, Tanner and Sieveking, give a doubtful.

Brown-Séquard, Marshall Hall and Schrœder Van Der Kolk, who have thrown so much light upon the pathology of epilepsy, are sanguine of cures, under their peculiar principles of treatment.

I quote opinions only to show that while we are advancing in these latter days, we have gathered only a few pebbles on the medical shore, while the great ocean lies beyond, and the study of epilepsy opens up a field for the medical student in the future, worthy of the highest effort in the cause of humanity and science.

If the world should ever be reconstructed, and placed upon the platform of that Noble Humanity born at Bethlehem, the free-offerings of individuals and States, would supply the means to open epileptic hospitals in every part of the land. Then we might expect results just as favorable and happy as those which follow the treatment of the insane in our lunatic asylums.

HOSPITAL GANGRENE, AS IT APPEARED AT THE CLAY AND CRITTENDEN U. S. A. GENERAL HOSPITALS, AT LOUISVILLE, KENTUCKY.

BY J. Q. A. HUDSON, M. D., CINCINNATI, OHIO.

(*Continued from the February Number.*)

TREATMENT.—The methods of treatment of hospital gangrene, vary with different authors according to the views entertained as to its character as a general or local disease. This is especially true of some of the older writers, particularly Hennen, who relied almost wholly upon general treatment. Most recent writers, however, whatever may be their pathological theory as to its nature, place great importance upon local remedies, and it may be laid down as a rule, that the success in treatment is commensurate with the use of energetic local remedies. Might not this fact tend to confirm the doctrine of its local nature?

At Bilbao, during the Peninsular war, in the summer of 1813, where Hennen had his observation and experience in this disease, and who treated it almost entirely by use of general remedies, the fatality was very great. (*Op. cit.*)

During the same summer, in the same campaign, at Passage, the disease was treated by Blackadder, (also a surgeon in the English army), by the local use of arsenic as a caustic, and with comparatively good success.

Local treatment was considered of the first importance at the Clay and Crittenden Hospitals, and I think this is true of nearly all the military hospitals in the west and south-west where the disease prevailed.

The principal local remedies used were, bromine, sol. permanganate of potassa, and nitric acid. The first two named were the agents mostly used; but our main remedy was *bromine*.

It was first introduced as a remedy in the treatment of hospital gangrene and erysipelas, by M. Goldsmith, Surg. U. S. V. It was used at first by reducing its strength, mixing it with water, by the aid of bromide of potassium. It was afterwards found that in hospital gangrene, the pure bromine was much more effectual, and those who had used it both pure and diluted, preferred the former in most cases, especially for the first application. It was used in the following manner. I shall give the details quite full, as many do not seem fully to understand the manner in which it was applied, notwithstanding the numer-

ous articles in the medical journals relative to its use, since its introduction:

If there is much extent of the gangrene, it is necessary to put the patient under the influence of chloroform. Then, by the aid of the forceps, curved scissors and scalpel, the dead gangrene is wholly removed, taking it *all* away down to the living part. The integument along the margin of the wound should be everted and the dead areolar tissue cut away. Sometimes it will be necessary to slit up the skin at one or more points, to have better access to the dead fascia beneath it. Where there are extensive sinuses formed along the course of the muscles and vessels, it is generally not advisable to cut the skin and deep fascia, and expose the whole of the interior of the limb; but as much of the gangrene as can be reached, should be taken away, and the rest left to the action of the bromine.

It may be advisable in *some* cases, to make quite extensive incision, exposing the parts beneath. It is difficult to give rules for this, and much must be left to the judgment of the surgeon in each particular case.

After the removal of the gangrene, the bleeding should be stopped by the application of cold water and the pressure of the sponge. In order that the bromine may act more effectually, the bleeding must be stopped and the surface made as dry as can be. A free use of cold water, alternately with the pressure of the sponge, will soon check the hemorrhage. When this is done, an assistant should hold the sponge firmly pressed upon the part until the very moment that the surgeon applies the bromine.

This is applied by means of a small bit of sponge fastened on the end of a probang, and the application should be made rapidly and thoroughly to the whole surface. The wound is then to be instantly filled with lint and the whole covered with oiled silk. Bandages or other means are then used to retain the dressing.

The irritating effect of bromine vapor upon the mucous membrane of the air passages should be obviated as much as possible, by preventing its diffusion around the patient and attendants. This is best done by having the bromine in a large-mouthed glass vessel, which one of the assistants should keep closely covered with a bit of glass, except when the surgeon is charging his sponge. The prompt application of the oiled silk confines the vapor to the wounded part.

The surgeon should guard against filling the sponge upon the pro-

bang with an excess of bromine, so that it will not dribble or drop in passing it from the vessel to the wound.

The sponge should be firmly tied upon the probang with thread or twine, *thoroughly waxed*, otherwise the bromine will destroy the thread and the sponge come off.

When sinuses exist which have not been opened, the bromine may be applied by pushing the sponge charged with it into them, or a solution of bromine may be injected into them. Before doing this, it will be necessary, by careful examination, to ascertain the size and direction of the sinuses, and there should be a full supply of probangs, large and small, with sponges attached according to size, so that the surgeon may select, to suit the dimensions and direction of the sinuses. A solution of bromine, made by dissolving one hundred and sixty grains of bromide of potassium in three ounces of water, and adding one ounce of bromine, may be used in the sinuses in place of the pure bromine. If, however, the sinuses are of easy access, so that the probang can be introduced and withdrawn easily, the pure bromine is preferable.

Where the cellular tissue between the large joints of a limb is destroyed, it will be necessary to make a counter opening and pass a dilute solution of bromine by means of a syringe through the sinuses of the limb, washing out the dead matter, and producing a change in the action of the part.

It is neither practicable nor judicious to produce the caustic action throughout the whole interior of the limb, when the inter-muscular fasciæ is destroyed; but a high degree of stimulation may be produced by injecting a solution of suitable strength, and the decomposition of the slough be checked.

We had several cases of this kind, only two of which survived. One, a sergeant, of strong constitution, from Posey county, Indiana, had a gun-shot wound at the upper part of right leg, about three inches below the upper extremity of the fibula. The ball fractured the fibula, and passed out on the inner and back part of the fleshy part of the leg.

The gangrene destroyed all the areolar tissue below the wound down to the ankle joint. There was great swelling of the leg. An opening was made at the inner border of the tendo Achilles, near the ankle, and injections were passed from the upper to the lower opening. The parts were washed out twice every twenty-four hours, first with tepid water and lastly with a weak solution of bromine—about one-

half an ounce of the above solution to two quarts of water. The dead areolar tissue and accumulated matters were freely discharged, and the swelling, in time, subsided, when the leg was kept firmly bandaged, the openings kept patent, the *injections continued, the gangrene firmly eradicated, and the patient removed from our ward.

During all his stay in the gangrene ward, he had very little general trouble. During the time of the full action of the disease in the leg, when the swelling was at its greatest and before the counter-opening was made, he had some fever, poor appetite, &c., but soon after the counter opening was made and the discharges became free, the swelling subsided, and with it vanished the general trouble.

It would be interesting to know in what state the muscles of the limb were after complete recovery in this case. This I am unable to give, as the sergeant went home on a furlough, and I lost sight of him.

In a case like this, it would be unwise to lay open the whole limb and apply to the whole gangrene surface the pure bromine. If the patient has sufficient power of resistance to the disease, he may live through it with the little aid the surgeon can give him as above directed. Few constitutions have this power.

As before stated, when the sinus is not of any very great extent, and easy of access, it is better to apply the pure bromine to it.

In its local action, bromine is one of the most powerful escharotics known. It instantly destroys the surface of the part to which it is applied, producing a thin superficial eschar of a yellowish-brown color. If there be little or no bleeding at the time of its application, it will be of a yellowish-white color. It coagulates the albumen of the tissues. In the rapidity and completeness of its action, it is probably not surpassed even by the actual cautery. The burning pain it causes, soon passes away. The most important feature of its action is, that the eschar it produces is *thin* and superficial, and soon separates from the living parts. In this respect, it differs from many other escharotics, such as potassa fusa and nitric acid, (unless the acid is perfectly pure and of the proper strength), the eschar produced by these agents is generally thicker and more slow of separation.

The treatment subsequent to the application of the bromine, is simple. The eschar generally separates in from one to three days, the time rarely extending beyond forty-eight hours, and in most cases leaves a clean healthy surface, free from the disease. There may be, however, in a few cases, one or more points left with the disease upon

*During the latter part of the treatment in this case, a weak solution of permanganate of potassa was used in place of bromine solution.

them, and requiring another application of the bromine or its solution. When these patches are found after the separation of the eschar, they are mostly thin and superficial, and it may not be necessary to cut away the diseased surface before using the bromine.

If the gangrene patches are small and the other parts of the wound begin to put on healthy action, the application of the bromine solution may be sufficient to check the morbid action and promote a separation of the slough.

Should there remain a large patch of gangrene, it may be proper to apply the pure bromine, and if it be of much thickness, it should be cut away and the bromine then applied, being cautious to limit its use to the location of the disease, and not to produce an eschar on the healthy surface.*

A frequent characteristic of gangrene wounds is a torpid, sluggish vital action. In these cases, the eschar separates very slowly, and the wound is slow to take on healthy action. Then it is necessary to use some stimulating application to rouse the languid vitality and aid in separating the eschar. The solution of permanganate of potassa, was found just the desired article to meet this indication.

In every case during the existence of gangrene in the wound, a solution of greater or less strength was daily used just previous to reapplying the dressing to the wound.

If the wound was doing well and the eschar separating finely, the solution was weak, say a table-spoonful to a quart of water, or sufficiently strong to produce a mild stimulation.

When there seemed to be much local inactivity, the strength of the solution was increased so as to cause considerable pain and irritation.

The effect of the solution in destroying the fetor and disinfecting the slough, is an item of no small value in its use.

It is not essential in every case of gangrene, that the diseased part be cut away. If the wound be of limited extent and there exists little or no constitutional trouble—if the slough be thin—the application of the bromine may suffice to destroy the disease and insure a separation of the slough. If, however, the wound be large or the system be much affected, the gangrene should be carefully cut away and the bromine applied to the living parts.

As regards the use of nitric acid, our experience is too limited to speak from actual observation. The bromine and solution of per-

*Dr. Goldsmith cautions against the too frequent application of bromine. After the separation of the slough, if small patches of gangrene remain, the application of solution of permanganate of potassa, of the full strength, as furnished by the Med. Dep. of the Army, is often sufficient to destroy the remains of the disease.

manganate of potash seemed to act so much more successfully than the nitric acid had previously been known to do, that there was no desire to experiment with the latter. For three days time, however, we were out of bromine, the supply being temporarily exhausted, and we were obliged to use nitric acid in its place. Its action was not satisfactory. It was used in three cases only. In all, the slough was longer in separating, and in two, the gangrene was not destroyed, and bromine had to be used subsequently. I ascribe these unsatisfactory results, as due, in a great measure, to the inferior quality of the acid used. It was neither pure nor of full strength. From the statements of many experienced writers, some of them of recent date, I should have confidence in the success of the judicious use of nitric acid of proper strength and purity on hospital gangrene; yet comparative results are more favorable to bromine.

Some form of application to the diseased part, capable of destroying a portion of the sound flesh in immediate contact with the gangrene, has long been the practice of all who believe the disease to be a local poison, and even of some of those who consider the malady constitutional.

The *actual cautery* is an old and favorite remedy with the French surgeons. A national prejudice foolishly forbids its use by the English. I should judge this to be an effectual agent, and would have more confidence in it than any other next to bromine. Its use in hospital gangrene has recently been revived by a German physician.

Arsenic was first applied by Blackadder, in 1813, and since then, occasional instances are given in medical journals of its use, and it is generally recommended by those who have tried it. The reports of its use are quite favorable, but the fear of its poisonous action upon the system by absorption, has probably deterred many from using it.

Citric acid, *nitrate of silver*, *chloride of zinc*, *chloride of antimony*, *potassa fusa*, *sulphate of copper*, have all been more or less used as caustics in this disease.

But little need be said upon *general treatment*. The ordinary principles of practice were observed. As stated at the commencement of this article, strict attention was given to cleanliness of patients, bedding, clothes, ward, &c., &c. Fresh air was bountifully supplied. An abundance of nourishing, digestible food was furnished. A large number needed only hygienic care. No medicine was given unless some systemic disturbance existed.

When there was much debility, a sustaining course was adopted.

Quinine and opium, whisky, milk punch, ale, wine, &c., &c., were given, according to present condition and previous habits of the patient. We did not (as we have seen done) simply because the patient had hospital gangrene, dose him with quinine or keep him fuddled on milk punch or whisky.

When there was decided debility, we gave alcoholic stimulants in some form, *if they agreed with the patient and were well borne.*

No writer, as yet, has been able to give infallible rules for the administration of alcoholic stimulants in disease. In many cases in which there seem to be strong indications for their use, yet, upon trial, either in large or small quantities, they are found to entirely disagree with the patient and do harm instead of good.

I have for a long time been accustomed in those cases in which I deemed stimulants advisable, to administer them cautiously at first, and be governed in their subsequent use by their effects in each particular case.

I have been the unwilling and silent observer of the injurious administration of whisky, or punch, or wine, or ale, simply because the patient was said to have typhoid fever, or typho-marial fever, or hospital gangrene.

Any medical philosopher who will establish reliable rules for the use of alcoholic stimulants in disease, *without previous experiment in each case*, will deservedly receive the encomiums of the profession.

INFLAMMATION OF THE VOCAL CHORDS—PATHOLOGICAL ALTERATIONS.

Translated from the German of Prof. Ludwig Turck, of Vienna,

BY THOS. C. HENRY, M. D., CINCINNATI, OHIO.

Contraction of the vocal chords can be caused through disease of the brain and spinal column. Till of late, but few very peculiar cases of this nature have been reported. Gibb avers that in some recent cases of hemiplegia passed by, inflammation of the vocal chords of the side of the portion affected has been observed to take place. Also, through the so-called progressive muscular atrophy, can inflammation of the vocal chords occur, of which I have myself had a case. There is known to be a disease of the motor nerves of the larynx founded

upon inflammation of the vocal chords. It is currently known that Bischof has called attention to it—stating that by the division of the root of the nervus accessorius in the interior of the brain, the voice becomes entirely lost. He observed that this was owing to the division of the recurrent nerve of the vagus, from the left, as we know numerous filaments of the nervus accessorius run off. It is maintained that from the recurrent nervus vagus to the muscles of the larynx, still other fibres concerned in motion are included, and, also, of the cricothyroydei—the extension of the vocal chords, separately and alone, from the nervus laryngeus superior can be seen. One case of mine, with fatty degeneration of the muscles of the larynx, apparently not long ago, having been under my charge, proved to me that this last statement is not altogether correct. By means of physiological experiments, instituted with relation to this subject, for the most part dating prior to the discovery of laryngoscopy, recording observations—in case of diseases affecting nervous (or dependent upon nervous irritation), with consecutive hoarseness or laxness of vocal chords. I will relate a case in point—relating to my experience in a case of compression of both nervi accessorii in the foramen lacerum. This case appertains to a man of thirty-one years of age, who, for two years past, suffered with pain in both sides of the larynx, and double vision, and since then severe and permanent paralysis of the tongue, and spasms—evident at the period of his admittance into hospital—one year before his death. Difficulty of speech was another symptom, and atrophy of the entire tongue, hoarseness without catarrh, which latter increased up to the period of his death—surely denoting disease (as an appearance of cancerous infiltration on section proved,) some part of the breast and a portion of the skin of both temples—so both condyles of the occiput; the latter with a considerable swelling in addition. Both the hypoglossal nerves in the transit through the bony foramen, were in a condition of degeneration on account of disease. Through the cancerous infiltration there was connection between the condyles of the occiput and the two corpora pyramidalia apparent. Through that passed the foramen lacerum on both sides together, and both nervi accessorii were under the free side of the upper segments of the fascicles, in a state of compression by this foramen. So that at this point there was very evident degeneration recognized, by which means the modified hoarseness resulted in the laryngeal affection. (Those muscles were not examined.) The extremity of the corpora pyrami-

dalia were swollen very uneqnally on account of deprivation of nutrition—nervus trigeminus degenerated.*

Still again, some cases of injury of the substance of the vagus nerve in the neck, caused by swellings of the glands, cancer, aneurism of the carotid, or scrofula, are spoken of by Friedreich as taking place. Beside, in this connection, belongs apparent injury of the recurrens nerves. Both nervi recurrentes come off usually from the main portion of the vagus, the right short division turns around the arteria subclava dextra, and from its place of origin around backwards to the left deep concave portion of the arch of the aorta, from thence both pass between furrow caused, or the inter-space formed by the trachea and the œsophagus, then upwards to the larynx. The nervi recurrentes can from this point lose their faculty of conduction by aneurism of the arch of the aorta—perhaps, also, of the right arteria subclava, and from chronic inflammation, as is admitted by laceration or disorganization, and, as I have observed, through compression without disorganization, (see Consecutive Stenosis of the trachea), through an apparent compression of the swollen glands, as verified (Gerhart) through the sinking of the nerves in cancer-swellings or indurations, especially the glands of the neck in tuberculous degeneration of lymphatics. I have determined by observation, in cases of tumors of the glands, on three several occasions in which were tumors of the neck extending under the clavicle, with evidence of lymphatic degeneration, tuberculous in its nature, with unmistakable tubercles degenerated, indicating a tumor with inflammation of the vocal chord on the same side.

In the fourth case, being the last in the designated locality found in the left cavity of the chest, viz: the upper lobes of the lung, taken hold of by the cancerous swelling. Lastly, it is allowed that the conductibility of the laryngeal motor nerves, viz: the accessorii, from their exit from their foramen in the skull, also, in some cases substantially, or by itself by transplanted meningeal inflammation, plainly, so as that by the nerves of the skull, and by the spinal marrow, other nerve-roots were found. By peirpheral degeneration of the nervus recurrens it is often atrophied. Huguier had, in 1834, a case in which was aneurism of the aorta and atrophy of the left nervus recurrens had been caused.

Brenton saw, in 1852, the two left nervi recurrentes for one and one-

* Turck, communications concerning diseases of the nerves of the brain.

half inches in extent, affected with an aneurism of the arch of the aorta. Their tissue exhibited a striking alteration and fatty degeneration, according to his statement. I have noticed the same in my cases of late. In front of the entrance to this fluctuating swelling, already alluded to, its point of exit, the appearance viewed by the microscope was normal, that is to say, between the swelling and the larynx, was an atrophied condition apparently, with diminution in size or fatty degeneration of the nerve tissue.

There are still other cases which might be alluded to, in which undoubted disease of the central nervous system, or of the motor nerves of the larynx are at the base of the disturbance. To speak of them would not throw any further light on the matter, as far as the nature of the inducing cause is concerned. In this connection, also, belong cases of undoubted tabies, cases of progressive muscular atrophy. As one such has been noticed by Gerhardt and myself; other cases in which, together with paralysis of the vocal chords, the same condition attending other nerves controlling motion, that of diphtheria is obscure. Independent paralysis of the vocal chords with paralysis of the soft palate, of which I, in the first place, and subsequently Gerhardt has alluded to form other cases. Although the muscles of the soft palate, also those of the vocal chords, likewise those of the accessorious were innervated; much in that condition at all events, judging by other causes, previously happening—still, in one of my plainly diagnosed cases, when severe paralysis of the palate was present with unsymmetrical movements, and degradation of the tissues of the recurrent nervus vagus—there being, as will be supposed, hemiplegia at the time (of the chords.) In this case, it was ascertained that after decease—the parts being examined—a small twig of the recurrent was given off through the muscles of the palate. A similar case, happening subsequently, it was noticed that with paralysis of the vocal chords, there was paralytic dysphagia, on account of imperfect closure of the glottis, limited, dependent action not to be mistaken. In the plain usual kind of cases—is such consecutive atrophy in the fibres of the constrictor pharyngeus inferior apparent that it causes soon wasting of the substance of the recurrens nervus vagus, and dysphagia, consequently.

The atrophy of the paralyzed muscles of the vocal chords, must be by the compression of a vagus nerve or a recurrens, inducing a so-called snorting or barking sound, which has been compared to the whinnying of a horse, or the whining of a dog. Brenton alludes to it as

occurring with some of his cases lately. It is a compression of the air-vesicles of the lungs, so affecting the respiration. I, myself, have, in a late case, likewise a case of decline of peripheral ailment of the recurrens nerve, found a similar condition, by laryngo-scopical examination—noticed left-sided paralysis of the vocal chords existing. At this time I found the muscular crico antenoidees posterior and lateralis, also filaments of the thyro-arytenoideus externus of the two sides pale yellowish red, and in a decided state of atrophy. By microscopical investigation, a streaked appearance of the transverse diameter of the throat generally seemed to constitute the ailment, or was only here and there indicated to be partly obliterated. In addition, there was a slight degree of atrophy occurring in the case of both crico-thyroie muscles—very considerable degeneration, with appearances of paleness, yet both thyro-arytenoid were not colored yellow (proper muscles of the vocal chords.) The atrophy was caused by the caving out of the unadjusted larynx—and both the vocal chords, from inspecting them above, standing or remaining, symmetrical in a crosswise light to the naked eye, the ulcerated free side being plainly seen. And then, indeed, in that ulcerated portion under the musculi arytenoideus transversus and obliqui, was recognized but little atrophy, evidently. The musculi ary-eppiglotiidei were only much weakened on both sides. The left nervus laryngeus superior, microscopically viewed, usually normal. Gerhardt met with a similar case. I have yet, in some other cases, noticed the same condition of things. The condition of musculus cricothyroydeus in the cases just last alluded to, proved the same, viz: atrophied. That which in a more recent period was stated, maintained of the nervus laryngeus superior, is inferred was not true; at all events, it must be nourished by a considerable number of fibres through the recurrens.

I had, also, an opportunity to pass judgment in a case of atrophy of the same laryngeal muscles, with an equal degree of intensity of ailment as in the foregoing cases, in which the corresponding nervus recurrens, as, also, the nervus laryngeus superior healed entirely normally. Besides the vessels were normal, except upon the diseased side, somewhat atrophied.

These former cases of mine, of peripheral disease of the nerve recurrens were exemplified in the case of a man of forty-six years of age. In 1846, with a chancre, accompanied by a severe syphilitic affection on its heels, soon after swelling on the shin-bone. In February, 1860, he was barely improved during the night, and remained

and the succeeding year, affected with severe hoarseness. First, (it may be,) in the spring of 1863, there appeared to a diminution of the hoarseness, co-existent with the looseness of the vocal chords, also decided paralysis, also, in the muscles of the legs, beside double vision to a certain extent, continuing until the year 1863. There was insufficiency of the aortic valves, and of the left arteria subclava—there being scarcely a sign of pulsation. Circulation had been carried on through the collateral branches, the axillary artery, and also the radial seemed to carry on a normal circulation. The left true vocal chord was perceived in a state of action by the seventh July, 1863, and since repeated examination in the median line, and on the side approaching the median line, together with the corresponding arytenoid cartilages, only partial motion could be induced.

The fourteenth September, 1864, death ensued. The nature of the palsy of the vocal chords was apparent, more particularly, in the upper portion of the nervus accessorius or its place of origin, or enough so, without investigation in the central nervous system.

In regard to this case of disease, constant formication, and imperfect anæsthesia, and in the entire body, or both sides, was indicated. Unfortunately the examination of the brain and spinal chord was postponed to such an extent that no thorough examination could be made.

In the first of the cases quoted, it seems, as it is mentioned, that the atrophy of the musculus crycoideus internus, by inspection from above of the free sides was plainly seen.

One can, laryngoscopic examination of the palsy of the vocal chords, atrophy of the chords in some cases, and so on, detect an excavation on the inner sides of the throat, somewhat curved in shape, appearing like the curve of a sickle. This excavation, which we see at times in the cadaver, upon section, being of no great extent, is no proof of atrophy. In this present day, such a case of irregular ulceration, with impaired mobility of the vocal chords, in the case of a person affected with syphilitic atrophy of the vocal chords, would not be taken notice of.

The atrophy of the muscles of the vocal chords, or rather with the muscles connected with them, can not yet be inferred in all cases by pathological anatomical researches. In cases, also, not old, of the periphery, in regard to the progress of the disease of the left recurrent nerve, even when sought for in the cadaver. The first laryngoscopic examination gave us the true form of the appearance of paralysis of the vocal chords, and never before the time of the invention of

the laryngoscope. It alone can exhibit both double and single paralysis of the vocal chords, to each form of which we can, now, lend a skilled hand.

NOTE BY TRANSLATOR.—There are well-established points of anatomy and physiology in regard to these laryngeal nerves.

The laryngeus, superior and recurrent, formed of motor elements derived from the vagus accessory and the sympathetic, go to the larynx on each side, from above and beneath.

The recurrent is chiefly a motor nerve, concerned in the mechanism of respiration.

The superior laryngeal supplies the cryco thyroid muscles.

Dilatation of the glottis is caused by the posterior crico arytenoid muscle.

Contraction, by the two transverse and oblique muscles aryetenoidei.

Tension and elongation of vocal chords occur through cryco thyroid muscles, by means of the ennervation of the superior laryngeus.

Tension and shortening through the lateral thyroid—edges of vocal chords—approximated by the innervation of the recurrent laryngeal.

SPASMODIC COUGH.

In this connection, we should allude to spasmodic cough, which occurs not unfrequently and much to the disturbance of innervation, particularly with reference to the larynx. Mandl has directed attention to this, and described the symptoms and appearance. It is of the nature of a quick and irresistible, rapidly succeediug one another, succession of short, violent fits of coughing, like barking in a deep tone, with apparent spasm throughout the whole entire larynx, trachea and bronchi. A case which occurred in my practice, happened to be a youthful woman, neither hysterical nor to be considered of a specially nervous temperament.

The attack comes on mostly very irregularly, often during the day. The intervals of coughing vary in length of time of occurrence, and like a double cough, so rapidly do the spasms succeed one another. This case of mine exhibits the typical condition to which Mandl calls attention. The affection is, according to my observation, a very stubborn one, thwarting the various methods of inhalation, narcotic antitypic, so-called nervines, emetic means, cold water cure and cod liver oil.

The fourth in particular, of my cases observed, occurred three times—young women of nine, eleven and fourteen years. In case of the one nine years of age, proved typically fatal.

Upon one evening, the fourth case happened in a nineteen years old, strong young man, in whose case only a very trifling bronchial catarrh existed.

In the case of a young maid, in whom the intensity of the cough

seemed to have arrived at the poriod of its natural severity, a catarrh of the vocal chords was diagnosed.

The fifth case was something anomalous, a seamstress of eighteen years old, Laura Op. She suffered, perhaps, five years, more or less; but the beginning attack was, for the length of a year, more especially severe. It came on of mornings every day, accompanied with acute pain in the throat—at times, intense stupidity. By violent exertion, overheating and the like, brought on cough, occurring more frequently as time progressed, so that she would have these spasmodic fits of coughing ten to twelve times in the twenty-four hours, one after another, with short intervals of quiet. She was kept on wine, and cared for in a warm room; but in less than a week she was suddenly seized with a general convulsion, and subsequent unconsciousness. During the progress of the case, about the 22d of May, 1862, occurred a similar series of coughing fits. An ordinary respiratory effort, followed by a remarkably hoarse sounding cough, singularly high in tone, ending with a whispering sound. Usually, there followed two or three such fits of coughing, with much apparent effort to cough in the intervals, causing much uneasiness—respiration otherwise normal in the intervals; but much effort very apparent and producing noise. By means of laryngoscopic observation, the throat, the back of the tongue, and the soft palate with the tonsils, present a normal aspect; but menstruation appears more oftener than usual. Examination by the ear showed rattling noises in both sides of the throat during respiration. The cough is a deep, harsh tone, but subsequently, a voice perfectly normal. Cold water cure here advised.

In one case of a ten year old boy, otherwise healthy, affected however, with a slight catarrh, and beside, with a deep, croup like cough, and coughs then as usually in a natural way. So often when he coughs strongly, the cough comes out deep and rough in tone, resembling croup, and is always limited to a sharp or shrill intonation. The larynx and the vocal chords, are proved to be in a normal condition, by inspection with the aid of the laryngoscope.

To conclude this article on spasmodic cough, I will append a few observations from Dr. Tobold:

"Nervous also called spasmodic coughs, have something in common with those that are denominated hysterical. They are characterized by spasms that occur with extraordinary violence. These attacks are separated from each other by long and entirely free intervals. They often appear at certain hours of the day, and are excited by other causes than the various

forms of cough that depend on morbid changes of the mucous membrane of the respiratory branch. In the majority of cases, I have met with nervous coughs in old women; in isolated cases also, in young, otherwise healthy maidens. In some cases, I was inclined to regard a strikingly anemic condition of the mucous membrane of the larynx, as the chief disease. Perhaps the nerve fibres in anemic mucous membranes are more inclined to hyper æsthesia."

Dr. Tobold recommends the use of a sponge applied locally, the same being saturated with tinct. ferri chlorid; also the use of electricity; other tonics also to be employed assiduously at the same time. Our few laryngoscopists in this country, use alum and glycerine locally, with much apparent success, combined with constitutional tonic measures.

FORTY YEARS' PRACTICE, OR REPORTS OF EXTRAORDINARY CASES.

BY NATHANIEL FIELD, M. D.,

Of Jeffersonville, Indiana, President of the Indiana State Medical Society.

Forty years in the medical profession, will familiarize the physician with all the diseases to which flesh is heir in the locality of his practice. He will become experimentally acquainted with their symptoms and treatment; so that when he meets with a case, however dangerous and complicated it may be, he is not compelled to resort to his books to enable him to make out a correct diagnosis, or to treat it successfully. Having often seen and combatted it before, he is fully prepared for it again. He is practically acquainted with the different modes of treating it, and he has firmly settled down upon what he considers the best remedies in the case. It matters but little to him what may be the speculations with regard to the etiology or pathology of the disease, or the *modus operandi* of the medicines which he knows will cure it. Having often administered them in similar cases with success, he is willing to trust them again. This is what we call "practical knowledge or experience," supposed to be of more value than the knowledge of a score of medical novitiates.

But in the course of many years' practice, cases will arise of an abnormal or extraordinary character, for which we have neither authority nor precedent; and which will tax the judgment of the physician to its utmost capacity. The following case is an illustration:

Some years ago, a small boy about five years of age, residing in the

city of Jeffersonville, apparently in perfect health, and while at play with other children of the family, was suddenly attacked with an epileptic fit, from which, however, he soon recovered. I was sent for to see him, but before I arrived, he was as well as though nothing had happened, having resumed his customary amusements. The parents of the boy were much surprised at the occurrence, and were unable to account for it. There was nothing in his appearance to indicate the slightest predisposition to the disease. He was the very picture of good health. As no cause could be discovered for the convulsion, and as there was no fever or any other sign of disease, no prescription was made.

About two weeks afterward he had another strong convulsion, lasting several minutes; but as before, passed off without any constitutional disturbance following it, and he was soon as rational and playful as ever. Being at the time absent from my office, Dr. W. F. Collum was called in, but finding the boy perfectly well, and like myself, not being able to detect any cause for the attack, and conjecturing that he might have worms, prescribed some anthelmintic. No worms, however, were expelled. In a day or two the fits returned, and were repeated at short intervals for about ten days, during which time I am confident he must have had a thousand! After an ineffectual effort to arrest them, Dr. Collum retired in despair. I was again summoned to attend him, and exhausted every resource in my power to relieve him. The family were in great distress and were prodigal in the employment of the best medical advisers. Prof. Powell, Prof. Drake and Dr. Richardson, of Louisville, were called in to assist me in searching out the mysterious cause of the terrible affliction. The patient was examined from the crown of his head to the soles of his feet, in the hope of detecting some local irritation, but none was found. After a few visits, the first two distinguished gentlemen, satisfied that nothing could be done to arrest the convulsions, abandoned the case. Dr. Richardson, however, persevered in assisting me to the end, curious as it seemed to me, to see the result. As he made but one visit a day, the burden of the labor necessarily devolved on me. Day and night, I was annoyed with repeated calls to visit the patient, and "do something for him." It was impossible to sleep at home or at the residence of the distracted family. Every antispasmodic had been tried in vain. All kinds of remedies, internal and external, based upon all manner of theories and hypotheses, respecting the pathology of the disease, had been employed to the fullest extent, and to no purpose. The convulsions were still

going on at intervals of ten minutes, defying the combined wisdom of two medical schools and two old doctors besides.

Driven to desperation, and worn out with fatigue and anxiety, I resolved to sit by the bedside of the patient one whole night, and try, if possible, to ascertain the cause of the trouble. It was in the month of December; and, long as the night was, I requested the family to retire to rest, and leave me alone with the patient, assuring them, if he grew worse, they should be notified of it. They assented to the arrangement, and I accordingly took charge of the patient for the night.

From the first, I had come to the conclusion that the irritation, whatever it was, had its seat somewhere in the periphery of the nervous system, and not in the encephelon or medulla spinalis, as my friend, Dr. Richardson, supposed; and the idea occurred to me that if I would notice what muscles were contracted first when a paroxysm came on, it might possibly give me a clue to the precise point of irritation, and, perhaps, the cause of it. With this impression, and in the hope that I might make a discovery that would relieve the little sufferer and myself, I carefully watched the commencement of the paroxysm. I observed that the muscles of the left side of the face invariably began to twitch on the recurrence of a fit. After the passing off of a convulsion, and while in a state of unconsciousness, I raised the upper lip as high as possible, and passed the index finger of the right hand around the alveoli, and lo, and behold! the corona of the second canine tooth, instead of having caused by its pressure the absorption of the root of the deciduous tooth, had passed behind it and forced it through the alveolus and gum and into the lip. I had often seen the same thing, but as this little boy was not quite old enough to shed his first crop of teeth, nothing of the kind was suspected in his case. Fondly hoping that I had found the latent cause of the frightful malady, I hastily slit the gum vertically and removed the old tooth. After pressing the edges of the incised gum together, and wiping the blood from the lips, I sat down to await the result. In less than an hour the convulsions began to subside, and before day they were entirely gone. As soon as it was light, the parents of the child entered the room, anxiously inquiring how he was. I informed them that between midnight and day the fits entirely disappeared. They could scarcely believe it. But there was the patient as bright, cheerful and rational as though he had never been sick. They were at a loss to account for the wonderful change; and acted as if they thought I had performed a miracle on

their son. I did not relieve their suspense, but kept what had transpired during the night a profound secret from them and the numerous friends visiting the house. I did not tell Dr. Richardson, who visited him in the afternoon, as usual; but left him in the dark as to the sudden change. He manifested much surprise; and made many inquiries, respecting the treatment during the night—whether any new remedy had been tried, and how it came that the fits left so abruptly under the treatment which had hitherto proved a failure. But no explanation was given at the time, and not until the family had removed from Jeffersonville, did I reveal to my colleague the facts in this singular case.

My reason for this reticence was, that I felt that the oversight of the cause of all the suffering to patient and relatives, and all this labor and vexation to the physicians in attendance, was a reproach to the profession.

It was a humiliating reflection, that five old and respectable practitioners of medicine, and two of them professors in medical schools, should allow a child to have fits for ten days, the result of so simple a cause, and not soon detect it! Here we were, day after day, holding consultations and philosophising about the pathology of the disease—one proposing the moxa, another ptyalism, another a blister on the head or the nape of the neck, and another something else equally as useless and injurious, when there was nothing the matter but an insignificant mechanical irritation, which could have been removed in one minute, provided we had been blessed with just common sense enough to see it.

*ON THE IDENTITY OF THE WHITE CORPUSCLES OF THE BLOOD WITH SALIVARY, PUS, AND MUCOUS CORPUSCLES.

BY JOSEPH G. RICHARSON, M. D.,

Formerly Resident Physician at the Pennsylvania Hospital.

The nature of the nucleated corpuscles so abundant in the saliva has long been a subject of some uncertainty, and although they have probably, as favorite test objects for the higher powers, been more frequently examined by microscopists than almost any other constituent of the glandular secretions, observers seem to have been generally contented to accept them simply as useful measures for the capacity of the

*Pennsylvania Hospital Reports, 1869.

higher objectives, and passed on without any attempts to solve the mystery of their origin; Köliker indeed advanced the theory that they were essentially a form of exudation corpuscles, but hitherto his hypothesis does not appear to have been generally accepted by microscopists as a fixed fact.

The following experiments, undertaken to elucidate their constitution, were performed with the large Powell & Leland's instrument, so long a denizen of the "Microscope Room" in the Pennsylvania Hospital, and no doubt endeared by constant association to many generations of "Residents," as well as myself. When it was discarded by the institution, I became the purchaser, and after undergoing some repairs, and having adapted to it a one-twenty-fifth inch objective (made by Mr. Wales, of Fort Lee, N. J.), it has accomplished the work below described.

The salivary corpuscles examined under a power of eleven hundred diameters present the appearance of perfect spheres, varying from the one-fourteen hundredth to the one-twenty-five hundredth of an inch in diameter, each having a very transparent but beautifully defined cell-wall of exceeding tenuity, which incloses from one to four almost equally transparent nuclei of a circular or oval form, whose diameters range from one-three thousandth to one-four thousandth of an inch. These nuclei are situated sometimes centrally but more commonly near one side of the corpuscle, and the cavity between the margin and the cell wall is generally filled with from twenty-five to fifty molecules, not more than one-twenty thousandth of an inch in diameter, whose characteristic is that of constant and rapid motion. Some of these molecules seem to be elongated into an oval or hour-glass form, but the activity of their movements renders it difficult to ascertain this with precision. In my observations these corpuscles have appeared to enlarge and become flattened, from the pressure of the glass cover, as the stratum of liquid beneath became thinner from marginal desiccation, so that usually in the course of an hour or so they burst, and discharge about one-fourth of their contents, when two, three, or more of the molecules swim away, continuing their revolving movements until they pass out of view; the other granules outside and those remaining within the cell become in a very few seconds entirely stationary. If a solution of aniline red, of the strength of one grain to the ounce of distilled water, be allowed to penetrate at the margin of the cover, the nuclei of the salivary corpuscle are readily stained of a bright crimson, and are thus exhibited with beautiful distinctness; the dye appears, however, to exert an immediate influence upon the movement of the molecules, as I have rarely been able to find cells in which they continued to move after the nuclei became at all colored.

In examining some urine, obtained on the eighth of August, 1868, near my late residence, in western New York, from a patient who complained of severe pain in the kidneys and bladder, I was surprised to find that a deposit, which appeared to the naked eye purulent, was chiefly composed of cells, exactly resembling in form, size, definite cell-wall, contained nuclei, and actively revolving molecules, the salivary corpuscles with which I had become so familiar; and should have

imagined that these proceeded from an accidental adulteration with sputum, had I not been fortunate to have ocular demonstration to the contrary when procuring the specimen. I examined these corpuscles repeatedly in the course of the two following days, during which the movements of the molecules continued, which I carefully preserved.

On consulting the text-books to which I had access, I found that neither Beale, Roberts, Bird, nor Naubauer and Vogel, in their works on the Urine, mentioned cells such as those above described, although the editors of the Micrographic Dictionary, in their description of the salivary corpuscles, state that they have been seen by myriads in the renal secretion; nevertheless, numerous specimens examined during the following few months, seldom without special scrutiny for similar bodies, afforded none, until in a deposit occurring from urine brought me by a medical friend about December first, the corpuscles I had so long been in search of were at last recognized, and on this occasion I was able to exhibit them to several microscopists, among others to my friend, Dr. H. C. Wood, Jr., Professor of Botany, in the University of Pennsylvania.

On the fifth of December I procured a sample of urine from a case of cystitis, which had only been passed a few hours, and on placing it under the field of the one-twenty-fifth, I found many of the pus-globules exhibiting the amœbaform movements described by Dr. Beale in his late elaborate work on the "Microscope in Practical Medicine;" no corpuscles containing moving molecules were visible, but observing that some of the pus-cells having a spherical outline were almost opaque and only about one-three thousandth of an inch in diameter, it occurred to me that they were perhaps only contracted by the exosmose of their fluid contents into the surrounding denser medium, and the idea suggested itself to try the effect of diminishing the specific gravity of the urine by the addition of water. Under this treatment I found that the cells which had been exhibiting amœbaform movements, soon assumed a spherical shape, rapidly enlarged until they reached the diameter of about one-seventeen hundredth of an inch, when the contained molecules began to revolve, and ere long took upon themselves the extremely rapid and confused movements which I had twice before seen in cells occurring in urine, and hundreds of times in the salivary corpuscles; the action of aniline solution rendered beautifully distinct, definite nuclei similar to those found in the salivary bodies.

The opportunity of corroborating the interesting and remarkable researches of Dr. Cohnheim, of Berlin, on the identity of the pus and white blood corpuscles thus obviously presenting itself, I proceeded with the following experiments. Drawing a drop of blood from the tip of my finger upon a "growing slide," I covered it with thin glass and placed it upon the stage of the microscope. After finding a white blood corpuscle showing well marked granules, I raised the objective, and arranged a fine filament of thread from the reservoir filled with fresh water to the upper edge of the cover, and a fragment of wet paper to the lower, according to the usual method of securing a constant current beneath the thin glass. On depressing the body of the instru-

ment and bringing the corpuscle again into view, I found it still adhering to the surface of the cover, notwithstanding the torrent of red globules hurrying over the field, and as these became paler and less distinct by reason of the diminished density of the serum, the white cell first gradually expanded and displayed its delicate wall with two rounded nuclei, then, after acquiring the magnitude of about one-seventeen hundredth of an inch, it exhibited the rapid and incessant movement of its contained molecules, and finally, when its diameter reached about one-fourteen hundredth of an inch, it burst suddenly, discharging a portion of the contents, whose outbreak resembled that of a swarm of bees from a hive, and some particles of which actively revolving as they went, swam off the confines of the field. On repeating the observation, and allowing some of the aniline solution to flow in with the water after the first few minutes, the nuclei were strongly stained and rendered beautifully distinct, although the movement of the molecules promptly ceased, in this respect as in all the others, showing a precise identity with the reactions afforded by the pus and the salivary corpuscles, as above described. It should be noted that a certain variable proportion of the white cells of the blood thus treated exhibited no moving molecules, and *apparently* consisted solely of nucleus and cell-wall.

It is worthy of remark that this experiment amply demonstrates the inestimable advantages of high objectives (which some even yet pretend to doubt), for the remarkable movement of the contained molecules seems to have escaped the attention of Prof. Virchow, the great author of "Cellular Pathology," himself (*vide* p. 181, Chance's translation, 1863). Although the observation was first made with the aid of a one-twenty-fifth, yet *afterwards*, knowing exactly what to look for, I had little difficulty in demonstrating to various gentlemen the revolving molcules thus brought into view with powers as low as the one-eighth of an inch.

A portion of fœtid pus from an abscess, and a specimen of mucus from the nasal fossa, under a like treatment, gave similar results, which did not materially vary in numerous trials.

Tracing now the white blood corpuscle from its condition of irregular outline and amœbaform movement, as observed in serum and heavy urine, when the cirumambient fluid approaches the density of 1028, through its round form with slightly more distinct nuclei, in the liquor puris, and in urine of lower specific gravity, we find that immersed in a rarer liquid, approximating to the mean density of the saliva (1005), it has an accurately spherical outline, is more than twice the magnitude, and contains a number of minute actively moving molecules, thus exactly resembling in all sensible characters the true salivary corpuscle; and it therefore seems reasonably certain that the blood, under the appointed nervous influence, congesting the buccal mucous membrane and associated glands, moves slowly enough through their capillaries to allow some of its white globules to penetrate the walls of the vessels, as they are said to do those of the frog's mesentery in Cohnheim's experiment (Virchow, Archiv, Band 40, S. 38, u. s. w.), which under the influence of the rarer saliva, expanding them and set-

ting free to move their contained molecules, constitute the bodies so long known to histologists, as the corpuscle of the salivary fluid.

Dr. Lionel Beale, in his work on the "Microscope in Practical Medicine," remarks in reference to the examination of the saliva: "In the somewhat viscid matter of which the salivary corpuscles is composed, are multitudes of highly refracting particles in incessant motion. The nature of these particles is extremely doubtful. They look very like the germs of bacteria, and it is possible they may be of this nature." If the hypothesis thus guardedly endorsed by the celebrated English microscopist be correct, it seems not improbable that the white corpuscles, either in the capilliaries or lymphatic glands, collect during their amœbaform movements, those germs of bacteria, which my own experiments (*American Journal of the Medical Sciences*, July, 1868), indicate always exist in the blood to a greater or less amount. And further, it appears not impossible, that when thus loaded, their elimination through the saliva, under the mercurial influence, and their evacuation by a discharge of pus from a seton or a tartar emetic ulcer, really constitute that therapeutic value of these remedial measures in certain cases which has long rested unexplained.

WOMBLESS WOMEN.

(The subjoined is an abstract from an article entitled *Surgical Cases, Devon and Exeter Hospital*, found in the last volume of *Saint Bartholomew's Hospital Reports:*)

That an incapacity for menstruation should consist with female health, is a strange fact. In two of the three following cases of wombless women, the defect was congenital.

Case I.—About nine years since, I removed the womb by ligature. In the "Address in Surgery" of 1860, I gave this case very circumstantially. The main facts were, that the patient was twenty-one; that it was her first labor; that she was delivered while standing; that the midwife tugged at the naval string; that the womb was everted; and that she nearly bled to death on the spot. After many months, when she was utterly exhausted by recurring hemorrhage, I tied the womb with Gooch's canulæ.

As I was going into the operating room, the nurse, a worthy old woman and a favorite, said, "Please, sir, if you take out her womb, I suppose she can never have her courses again, and if so, what then?" I replied, "Nurse, if I do not take out her womb, she may die before night. If I can, I will save her life now. That is my present thought. I can not look beyond that."

After all manner of perils, she made a thorough recovery. Of course she has never menstruated since, but when I saw her, three years after, she was in good health and good spirits. I know that she was perfectly well several years after that. Her whole aspect is feminine, her complexion is fair and delicate, as it always has been, but in

no wise chlorotic. She walks with her young man like any other servant girl; she cares nothing for the loss of her womb, which seems to have produced no other effect, moral or physical, than the cessation of her menses. That is the answer to the nurse's question, "if so, what then?"

Case II.—About four years ago, a very delicate young woman, æt. twenty-five, evidently in declining health, came under my charge at the hospital. She told me she had been left an orphan, (I believe one at least of her parents had died of consumption), that she was delicate, and had not been able to retain her water like stronger girls; but that she had been brought up carefully; was now the mistress of a national school, and had married at twenty-three. She then added that coition had from the first been accompanied by pain, which instead of diminishing, as she expected, had increased, until she could not bear it; and that her urine escaped from her involuntarily. She and her husband, who were reputed to be very worthy young people, and a most attached couple, were greatly distressed, as they well might be. I learnt then, also, that she had never menstruated.

Her pudenda were perfectly natural. About three inches up the vagina there was a sudden narrowing, like a stricture. Its circular edge was soft, and the orifice sufficiently open to admit the finger; but it could have been easily dilated to a greater extent. It exerted a gentle compression.

This was the sphincter, and beyond it was the bladder. There was no trace of a womb.

I told her that sexual intercourse must cease forever. She was much grieved on her husband's account; of whose regard for her she spoke with genuine feeling. I recommended tonics, and she went home.

I heard nothing of her until lately, when she and her husband called on the nurse. They appeared a fond couple still. Her health was restored; and the incontinence of urine not worse than when she was a child.

Case III.—I was consulted in the case of a lady's maid, æt. 40, who previous to the last six weeks, had enjoyed excellent health. She was a neat little figure, a brunette, must have been pretty, and was young looking for her age. She had a swollen knee, and flying rheumatic pains, for which she could not account, but she was chiefly harassed by an irritable bladder. Micturition was frequent, scarcely to be restrained, and painful both at the time and afterwards. She had used a hip-bath and opiate fomentations, with partial relief. I was to ascertain if a urethral wart or a calculus occasioned her distress.

Her urine had always been apt to escape when she coughed, but she had not been subject to leucorrhœa, and she never menstruated.

The external appearance of the genitals had nothing peculiar. The pubes and the labia were natural; the glans of the clitoris and the nymphæ were fully developed; but I could not find the urethra.

The vagina was such as might be expected in a virgin, except that there was neither transverse rugæ, nor hymen, nor carunculæ, nor fossa navicularis. It opened abruptly, just in front of the perineum. It admitted the finger, which, when it had penetrated somewhat less than

three inches, came upon a dimple. This yielded, circularly, on gentle pressure, and the finger entered the bladder. As it was withdrawn, the sphincter closed again. The bladder was not set on obliquely like a womb; but quite at the end of a canal, which was no vagina at all. It was simply a preternatural urethra applied, as in the male, against the rectum. There was not the slightest trace of an os uteri or cervix —neither could any womb or corresponding body be felt from the bowel.

She told me that, some years before, she had been engaged to a young man, who died. Spoke of him, as a woman should, tenderly and regretfully; but did not affect to represent her love for him as Platonic.

Judging from these cases, the menstrual discharge is not necessary to the health of a woman who has no womb. In the intervals between one pregnancy, or lactation, and another, it would appear that the presence of a womb has a special and accumulating influence on the constitution; and that it is thus the organ which, by its own periodical discharge, affords that relief to the whole frame, of which it has itself created the necessity.

It is the womb alone, and not the whole generative apparatus, or, indeed, any part of it. Looking at their personal appearance, their views, manners and habits, and their womanly, albeit their correct and estimable feeling toward the men they loved, I believe the subjects of the cases II and III to be real women—saving their wombs. If it be contended that their ovaries may likewise be wanting, I can only reply that, in case I the generative system was undoubtedly complete, for that woman lost her womb, and nothing else, after bearing a child; and yet she is as healthy, without menstruation, as the two others, who never had a womb.

CLINICAL LECTURE ON TREATMENT OF CARBUNCLE.

BY JAMES PAGET, D. C. L., F. R. S.,
Surgeon to St. Bartholomew's Hospital. (Short-Hand Report, revised by the Author.)

GENTLEMEN: You have recently had the opportunity of seeing four cases of carbuncle treated in my wards after methods which you would probably describe, if asked to do so, by saying that "nothing was done for them." Here are the patients' papers; and there is, to be sure, no medicine set down for them to take, and you know that no surgery was inflicted on them—and yet a good deal was done for them, though the treatment was what does commonly pass by the name of "doing nothing." They were carefully fed, washed, cleaned and bedded; and their carbuncles were very skillfully dressed and washed with proper things, and every care was taken to shut out all untoward influences from them. And if any complication in their cases had arisen, these

would have been immediately met. But no complications occurred; and, therefore, the cases passed through their course without treatment, as it is said—that is, without medicine, and with no surgery, no active surgery, no incisions or anything of that kind. And since all these cases passed through their course very favorably, and all the patients were, or will be, discharged at a comparatively early time after their admission into the hospital, I will take this occasion of giving you some observations on the manner of treating this disease.

Although you may not have seen much of it, you must all have heard of the ordinary manner in which carbuncles were treated formerly, and still are by some; a method which consists mainly in making large incisions through them, and giving very large quantities of food and stimulants, as well as considerable doses of quinine, bark and other tonics. I do not at all mean to say that the things which in these cases I left undone would have done any harm; but what I hold of them is, that they would have been quite useless, and some would have been sources of great discomfort to the patients. And in the way in which I speak of these things you may notice that I exemplify that rule which I always impressed upon you, of asking yourselves, when you seem to have been successful with some medicine, "What would have happened if I had not given it?" The apparent consequence of giving a medicine may be plain enough; but you can not too often repeat to yourselves the question—as a rule, I will not say of practice, but of the study of your own practice—"What would have happened if this or that, which seems to have been successful, had not been done?"

First, with regard to the incisions made in carbuncles. The ordinary plan, still recommended by some, is, as soon as a carbuncle is seen, to make two incisions crucially from border to border. It is said that they must go even beyond the edges of the carbuncle into the adjacent healthy textures. I have not followed that method of practice very often, but I have followed it quite often enough to be sure that it does not produce the effects which are commonly assigned to it. It is commonly said that if you will thus make crucial incisions into a carbuncle, you will prevent it spreading. If you can find a carbuncle two or three days old, and cut that right across in both directions, I think it very likely that you will prevent it spreading. But even therein is a fallacy; for there is no sign by which, on looking at a commencing carbuncle, you can tell whether it will spread or not, whether it will have a diameter of one inch, or of three, six, or ten inches. The question, therefore, that I spoke of comes back, "What would have happened if I had not made these incisions?" And the answer to that question will be rather according to temper than to knowledge. For as I watch men in their conclusions upon such cases as that, I generally find that self-satisfaction says, "I saved the man's life;" self-dissatisfaction, "I did him no good." The truer scientific temper stands midway, and says, "I will wait for further information on the matter—till I have seen more cases, and then decide whether, in the earliest stages of carbuncle, incisions are useful or not." After this time of three or four days I have seen sufficient numbers of carbuncles thus

divided, and have divided enough for myself, to say that it will not prevent spreading. I have seen carbuncles spread in as large a proportion of cases after incisions as in cases that have never been incised at all. I have in my mind a striking case that occurred to me early in practice, when I followed the routine, and, in a friend of my own, divided a carbuncle most freely. I cut it after the most approved fashion, in depth, and length, and width, and then it spread. After two or three days more all the newly formed part was cut as freely as the first, and then it spread again, and again it was cut as freely. Then it spread again, and it was not cut. Then in a natural time, it ceased to spread, and all went on well. These are only general impressions that I give you, because one can not count the cases in which cutting has been practised, and those similar cases in which it has not; nor even then could it be said whether those in which the cutting was practised would have spread if left alone. On a very strong general impression, however, I say that carbuncles will spread after cutting in as large a proportion as they will spread in without cutting.

Then it is said that carbuncles are relieved of their pain if they are thus freely cut. Here, again, however, is only a partial truth. A carbuncle of two or three days standing, which is hard, tense and brawny, is very painful; and cutting it will relieve, in many cases, a considerable portion of the pain. But after this, when the carbuncle begins to soften, and when pustules begin to form upon its surface, and pus in its interior, it ceases to be painful of its own accord, and without incisions. Thus there are two distinct stages of carbuncle in reference to the pain; the early stage, when hard and still spreading, is generally intensely painful, and the latter stage, in which the pain nearly ceases. A carbuncle divided in the first stage, in the first two or three days of its existence, may be relieved of some of its pain; if divided in the latter stage, what little pain may exist is altogether unaffected by the cutting. And even cut as you may, you can not always put aside the extreme pain that a carbuncle sometimes has, even to its latter time. Some two or three years ago, I was called to a member of our profession with a large carbuncle in the middle of his back. His friends had been much alarmed about the state of his mind, for he had been suffering great mental anxiety for some time, and they were in fear lest the excessive pain of the carbuncle should, in its disturbed state, do his mind permanent damage. So they persuaded me to cut it, and I cut it after the old plan, very wide across, and far into the adjacent textures, as freely as could be. It did not in the least relieve him. I never saw a carbuncle through its whole course so painful as that was, and up to the last, until the healing was nearly completed, he suffered more or less pain in it. So that the conclusion in reference to the pain must be this: if they can be divided in the first three or four days, while still hard and brawny, it may relieve some measure of the suffering; at a latter period the incisions have no influence at all.

The third point is stated thus, that by the incision of carbuncles you accelerate their healing, giving facility for the exit of sloughs. But herein is the greatest fallacy of all. When the cutting of carbuncles was more customary in this hospital than it is now, when I did

not cut them and some of my colleagues did, I used to be able to compare the progress of cases cut and of cases uncut, and time after time it was evident that the cases uncut healed more readily than those cut. A man who is now in the hospital I have brought round here that I may illustrate this point to you. This is the man, Timothy C———, aged fifty-five. When he came in, his carbuncle had a length of more than six inches, and a breadth of three and a half; and it formed the ordinary hard, compact, tense and brawny mass that a carbuncle usually does. It had at that time already taken to suppurate, and little pustules were pointing on the surface. If I had followed the practice of incisions, I should have had to make a cut in one direction of about seven inches, and the other of about five, and after that I should have had not only the wounds wide, open and gaping, and having themselves to heal, but a great part of the substance of the carbuncle fairly exposed, and also under the necessity of healing. But you will observe that the whole of the space that now remains to heal is a series of openings in the middle of the carbuncle, through which the sloughs are to be separated, through which, indeed, nearly the whole of the sloughs have already been discharged, and which now merely remain to be healed like the cavities of small abscesses. In that way you narrow greatly the extent of the wounded surface to be healed. Indeed, it by no means always follows that the whole carbuncle, or its whole base, sloughs. Carbuncles, if not divided, not unfrequently only suppurate about their centers, and slough only in their central parts, and the borders merely clear up by the softening and dispersion of the inflammatory products in them. In every case of that kind you save greatly the amount of healing which has to be gone through. Nay, in some cases carbuncles completely abort. One of these cases, of which I have the paper on the table, was that of a woman, aged sixty-four, who came in with a carbuncle nearly as large as this, in a condition which, it might be said, required incision at once; but, with the exception of two or three small points, no suppuration or sloughing ensued. That carbuncle dispersed, aborted, cleared away. This case shows the more ordinary course of events—the sloughing of the central part, the gradual discharge of the sloughs, and the comparatively small spaces which are left in the center of the carbuncle as the sole space in which the process of healing has to be achieved.

On these three points, which are the grounds that have been assigned as reasons for cutting carbuncles, I have now given you the evidence on which I have ceased from the practice. I fully believe that crucial incisions do not prevent extension; that it is only a limited set of cases in which the incisions diminish pain; and that with regard to the time that is occupied in healing with or without incisions, the healing without incisions is very clearly and certainly a great deal the quicker.

The kind of incisions that I have been speaking of is the old plan of crucial incisions. Another method which I have occasionally tried, but of which I can only state the same general results, is that of subcutaneous incision. This has been supposed to have the same general

effect as the other; and I think the same general conclusions may be drawn respecting it: that it is a measure unnecessary in the treatment of carbuncle, and that it retards rather than hastens the healing. When I speak thus of the incision of carbuncles, however, I do not mean to say that there is no condition of carbuncle in which an incision is not useful. Sometimes a carbuncle sloughs in its central part, with one continuous slough of integument holding a quantity of pus. In that case you would cut through the slough, or through any adjacent part of the carbuncle, to let out the pus, as you would open an ordinary abscess. But this is not a measure which is commonly understood by the "incision of a carbuncle."

If you ask why one may not cut a carbuncle though it may do no good, I reply that you should never be actively useless, and that there are some cases in which cutting does considerable harm. Carbuncles, for the most part, occur in persons broken down in health, exhausted by over-work, or by bad food, or in general deteriorated health—as sometime in diabetes or albuminuria; and in all these states it is a good general rule to save the blood they need for healing. The loss of blood from the carbuncle itself would not be considerable; the hard substance of the carbuncle, when cut into, does not bleed, or bleeds but little. But to carry out the incision perfectly, you have to cut into the adjacent healthy texture; and this sometimes bleeds very profusely, so as to lead to all the distress and pain of plugging the wound with this or that substance to arrest the blood.

Another measure in the treatment of carbuncles which is supposed to be necessary, is very high feeding and large quantities of stimulants. I learned the opposite of this in one of those cases which you will do always well to study—those, namely, in which the patient refuses to do what you advise him. It is from such cases that we may often learn what is commonly called the "natural history of disease"—its course undisturbed by treatment. A case occurred to me once of an old gentleman, eighty years of age, who had a carbuncle, as big as it could be, on the back of his neck, for it extended from one ear to the other, and from his occipital spine to the third cervical vertebra. He measured it for his own amusement, and it was fourteen inches over its surface transversely, and nine inches vertically—a carbuncle, then, of the largest size, and one, it might be supposed, attended with considerable risk to life. I urged him very strongly to take a large quantity of what is called "support," for I was at that time under an impression of its necessity. He absolutely refused, however, and nothing would induce him to take it. I was therefore content to stand by and study the natural history of disease in this huge carbuncle; and the natural history of it was a history that one would have wished to witness in every carbuncle of its size, for no case could pass through its course in a better method. He led his ordinary abstemious life, took moderate quantities of food and of stimulant, lived through a carbuncle of the greatest severity, and finally made a complete recovery and lived for several years after.

Another case which impressed me very much was that of a friend of my own in the profession, who had a carbuncle on the back of his

neck, of very considerable size. Sir Benjamin Brodie and Mr. Stanley attended him with me, and under their advice the carbuncle was cut. I watched its course afterwards, and felt sure that the cutting had done neither good nor harm. It went on as carbuncles do when not cut. But the gentleman was subject to intense headaches, of which he knew by experience the only possible remedy was almost entirely to leave off food, and absolutely and entirely to leave off stimulants. One of the headaches occurred during the course of the carbuncle, at a time when we had put him upon very full diet and abundant stimulant. He said then that he must leave off his stimulants and food, and we looked with some alarm on what would be the result on the progress of the carbuncle. I remember Mr. Stanley saying to him, in his distinct manner, "My dear fellow, if you don't take food, you will die." "Very well," he said, "then I will die, but I will not take food and increase my headache." According to his own wish, therefore, we reduced his diet to a very low level. The course of the carbuncle was not affected at all, unless it were for good; and after three or four days of this, which might be called comparative starvation, he described himself in his own emphatic fashion as being "as jolly as a sand-boy."

Since that time I have watched carefully all cases that I have seen, and I am certain that there is no good to be obtained by large feeding or abundant stimulants in ordinary cases of carbuncle. The whole of these cases that have been in the hospital were put on our ordinary meat diet, with a pint of porter daily; and I see that two of them have had four ounces of wine a day, one of these being a person aged sixty-four and the other sixty-three, and both having carbuncles of considerable size. You will find that for patients in private life it will do very well if you tell them that they may have about two-thirds of their ordinary amount of food, and about the same proportion of their ordinary quantity of stimulants. But indeed there is scarcely any reason to change in any material degree the ordinary mode of life of a patient with carbuncle. So far as he can with comfort take that to which he is accustomed, so far he may. If his diet has been habitually low, so it may remain; if habitually high, so, within certain limits and somewhat reduced, it may still remain.

Now you may ask what I should set down as the things to be done for a carbuncle. These boards, nearly bare as they are, may tell you. In local treatment one of the best things you can do, if the carbuncle is small, is to cover it with emplastrum plumbi spread upon leather, with a hole in the middle through which the pus can exude and the slough can come away. That, occasionally changed, is all the covering that a small carbuncle will need. It is difficult thus to cover the whole surface of a large carbuncle, and to keep it clean; therefore, I think the best application for that is the common resin cerate. This should be spread large enough to cover the whole carbuncle, and over it should be laid a poultice of half linseed-meal and half bread. And, if you want to exercise your skill, learn to make that poultice well, and to put it on well, and to keep it in its place well. That mode of dressing the carbuncle, so far as the materials are concerned, will last through its whole course; but whilst the carbuncle is making progress

and discharging its slough, you will find plenty of room for the exercise of considerable skill in dressing it, and filling up the cavities with soft substance spread with this ointment. Besides this, the carbuncles are to be carefully washed, especially with some deodorising substance, as Condy's fluid, or weak carbolic acid, and the cavities may be syringed out with it. The importance of cleanliness is very great. You noticed in the man whom I showed you just now, the spots of acne and boils around the edges of the carbuncle. This points out the necessity of care, which I suppose had not been taken there, to keep the surface of the skin adjacent to the carbuncle perfectly dry, and free from any contact with the discharge, which seems really to have the power of infecting the neighboring skin, and so producing the boils which are apt to arise, sometimes in clusters, around the carbuncle. Of diet I have already spoken to you. Of medicines I say nothing. Quinine, bark, and other medicines of that class, may be given if you please, or in case of evident need, and so may aperients; but there is really no need of them in an ordinary case of carbuncle. But there is one medicine which you may find very valuable, and that is opium, especially in all the earlier painful stages of carbuncle, in which it relieves the sufferings as thoroughly as incisions, or anything I know. After the early stages, even that is unnecessary, except for some patient who may be unable to sleep.

But there is one measure in the treatment of carbuncle which is seldom employed, and yet is of great importance, and that is letting the patient have very free air. The general idea that carbuncles are very dangerous diseases, has commonly led to the patients being entirely confined to bed and kept shut up in their rooms. There is in that an unnecessary care; and this, too, I learned from a patient who refused to comply with injunctions—a gentleman with a large carbuncle on the back of his head, who would not keep his bedroom. He had been accustomed to an active life, and after seventy or eighty years of that custom, he was quite indisposed to remain in his room. So with that carbuncle he daily came down stairs, changing his room and moving about the house as well as the pain and weakness would allow him. No carbuncle could go on better; all the stages were passed through without any risk or trouble, and it healed with unusual speed. After that I had a yet more striking case. A lady came to London "for the season," as she called it; and she had not been here more than a week or ten days before a carbuncle came out on the back of her head, just under her hair. It was a great vexation to her that she had to give up all her amusements; and so, as she did not mind the pain, she would go out. And it was then that, for the first time and the last, I saw any value in a "chignon." She dressed her carbuncle under the chignon, and went to the park, to the theater, and to dances unharmed, and with her carbuncle quite unseen, and no trouble whatever followed. It healed up after the ordinary fashion in about the ordinary time. But, indeed, you may see cases of this description on a much larger scale, if you watch the carbuncles that come to us in the out-patients' room. There we often see them of considerable size, and they do as well among the out-patients as among the in-patients; and

yet these out-patients are freely in the air all day. And many of them continue at their work. So you may set it down as one point to be attended to in the management of carbuncles, that patients should not be confined to their room. They should at least have change of air in their own house; and, unless they are too low, they should not avoid exposure to the fresh open air.

Treating your cases of carbuncle upon this plan, I believe you will find that the great majority will pass through their course well. I can not tell you what the ordinary proportion of deaths from carbuncle is; but I know that carbuncles are commonly looked upon in the profession as dangerous things, and a large carbuncle on the back of the head is considered to be fraught with risk to the patient's life. But that is very far from being the case in my experience. Remembering, as far as I can, or rather guessing at the number of carbuncles I have had to treat, I should say that there is no other disease of the same extent and general severity which is attended with so little risk to life. During twenty years of hospital and private practice, I can not have treated less than two hundred carbuncles: and of these two hundred, four have died, giving a mortality, at a fair guess, of only two per cent.—a mortality which is less than that of most of the minor operations of surgery, and less really than that of any disease of equal severity that you can name. Of those four deaths, one occurred in a patient aged seventy-eight, who died of erysipelas after the carbuncle had nearly healed. Another was a gentleman of about fifty-five years of age, who died of chronic pyæmia. The third was a gentleman aged fifty, who died with acute pyæmia. And the fourth was a patient of about fifty years of age, who died rapidly exhausted. The first three were from causes which may almost be called accidental; for so we call them when occurring after an operation, and it would be unreasonable to suppose that any other method of treatment would have averted the consequences. The other died, possibly, on account of the deficient stimulation; for he was a man who had lived freely, and took during treatment less than he had been accustomed to have. The main point, however, to which I wish to direct your attention, is that the mortality may be as little as two per cent. I can not doubt that the mortality was considerably larger when carbuncles were severely cut; for the severe cutting meant often severe bleeding, and was attended with all the consequences of large wounds. Thus, though I do not know the exact proportion, I believe that the general reputation of the danger of carbuncle was well founded, and that among the reasons for the diminished mortality of carbuncles may be set down as chief, the more frequent avoidance of the custom of cutting them.

Speaking of the mortality of carbuncle, however, I must remind you that I am not speaking of a disease which sometimes passes under the name of carbuncle—the carbuncular inflammation of the lip which sometimes occurs in young persons; a disease which you may not have seen, and may pass many years without seeing. It was described by a former house-surgeon of this hospital, Mr. Harvey Ludlow, as malignant pustule of the lip. Dr. Budd, of Bristol, has also so described

it. Commencing at one spot, inflammation of the whole lip follows and spreads to the face, and then disease of the lymphatics ensues, with pyæmia as its consequence. It is a disease so unlike carbuncle, that it ought not to be known under the same name. It seems to me not like the accounts given of the malignant pustule abroad, and I have seen no other disease like it in England. It attacks especially young persons from fifteen to twenty-one; and of fifteen cases that I have seen, only one recovered. That disease is not carbuncle, nor is the mortality of that disease to be counted in estimating the mortality from carbuncle. Ordinary carbuncle on the lip and face has none of those special characters, and is not more fatal in those situations than in any other.—*Lancet, January 16th, 1869.*

BIBLIOGRAPHY.

ESSAY ON THE THERAPEUTIC VALUE OF CERTAIN ARTICLES OF MATERIA MEDICA OF RECENT INTRODUCTION.

BY JOHN H. GRISCOM, M. D.

Reprinted from the Transactions of the New York State Medical Society for 1868. Albany: Van Benthuysen & Lous' Steam Printing House, 1868.

This brochure of nineteen pages, presents "the results of an extended and successful experience with the employment of two articles of the materia medica of comparatively recent introduction"—the *sulphite salts* of *soda*, and *glycerine*—the first as an *internal*, and the second as an *external* remedy.

Dr. Griscom states that he has employed the first named article in about three hundred instances, with scarcely a single failure in those cases, to which, according to his theory of its *modus operandi*, it was specially adapted.

Dr. G. believes that this medicine, when used internally, acts not only as an antiseptic, a preventer of decomposition and of fermentation; but also a promoter of digestion in cases in which the gastric juice may be deficient in some of its essential acidulous ingredients. The diseases in which it has proved most useful, are diarrhœa, dysentery, cholera morbus and dyspepsia. The dose is "from five, to twenty, forty, or sixty grains, according to the age of the patient and the

force of the symptoms, administered two, four, or six times a day." We are informed that in all zymotic diseases, this remedy may be employed with assurance of powerful aid to other medical measures. When all the author's sanguine expectations in regard to this medicine are realized, we may say that for most diseases,

——"The sovereign'st thing on earth,"
Is soda sulphite.——

While we regard the sulphite salts of soda as valuable medical agents, our limited experience leads to the conclusion that they have less value than has been assigned them by Dr. Griscom.

The valuable results the author claims to have obtained from the external application of glycerine, were dependent upon the affinity possessed by this agent for aqueous fluids, including the serum of the blood. The following extract presents the views of Dr. G.: "In furuncles, erysipelas, ophthalmia, nasal inflammation, urethritis, and other inflammatory and congestive troubles—in not one of a large number of such cases, have I been disappointed in the alleged tendency of the oil to drain off the serum, even through the perfect integument, and the effect has been almost as uniformly demonstrative of its depletory power as if the blood itself had been removed from the part. In fact, glycerine may be regarded as a good substitute for leeches and blisters, and in some instances, for surgical operations."

J. R. W.

PRONOUNCING MEDICAL LEXICON, CONTAINING THE CORRECT PRONUNCIATION AND DEFINITION OF TERMS USED IN MEDICINE AND THE COLLATERAL SCIENCES, WITH ADDENDA, CONTAINING ABBREVIATIONS USED IN PRESCRIPTIONS, AND LIST OF POISONS AND THEIR ANTIDOTES.

BY C. H. CLEAVELAND, M. D.

Eleventh Edition. Philadelphia: Lindsay & Blakiston, 1869. Price, $1.25.

Daily observation renders the fact evident that a work of this kind is needed. Students, in their pronunciation of medical terms, usually follow the usages of their preceptor and the professors of the colleges they attend. These persons are, unfortunately, not always entirely

reliable, and as a consequence, the habit of mispronouncing certain words is acquired, a habit that will certainly, sooner or later, cause its possessor great annoyance. The use of a carefully prepared pronouncing lexicon, will do much to prevent such a result. The one under consideration may be generally depended on for correct pronunciation; yet it is not always infallible. The phonotypic alphabet is used to represent pronunciation. This alphabet, containing, as it does, a distinct character for each of the forty-three elementary sounds, allows the precise pronunciation of a word to be represented without difficulty. This alphabet is given and a knowledge of it can be acquired in a short time. J. R. W.

THE PHYSICIAN'S DOSE AND SYMPTOM BOOK, CONTAINING THE DOSES AND USES OF ALL THE PRINCIPAL ARTICLES OF THE MATERIA MEDICA AND OFFICINAL PREPARATIONS, &c.

BY JOSEPH H. WYTHES, A. M., M. D.

Eighth Edition. Philadelphia: Lindsay & Blakiston, 1868. Price, $1.00.

The favor with which this little manual has been received, as shown by the demand for an eighth edition, sufficiently proves its value. It was compiled for the use of students; but it also seems as a *vade mecum* for the general practitioner, and serves the trouble of reference to larger and more elaborate works. J. R. W.

ON CHRONIC BRONCHITIS, ESPECIALLY AS CONNECTED WITH GOUT, EMPHYSEMA, AND DISEASES OF THE HEART.

BY E. HENDLAM GREENHOW, M. D.

Philadelphia, Pennsylvania: Lindsay & Blakiston, 1869. Price, $2.50.

The author of this exceedingly instructive little volume comes not unheralded among us. His very valuable observations on *Diphtheria*, published in *The Lancet*, not long since, are still fresh in our memory. Evincing, as those articles did, so much careful thought, Dr. Greenhow has impressed us with the idea that he is a writer, from whom, to

use a common expression, "we expect great things." To say that in his present undertaking, all of our anticipations are fully realized, would be but paying him a compliment to which he is justly entitled.

The subject of his book, *Chronic Bronchitis*, will appear to many, rather trite and prosy. So it is, as ordinarily treated of in the various text books; but Dr. G. throws around his theme so much of freshness, so much of novelty and originality, that he seems, as it were, to be advancing into a territory altogether new and unexplored.

The work, which is eminently clinical, does not, as our author states, profess to be a systematic treatise on bronchitis, but is simply a record of certain opinions and conclusions concerning the pathological nature of that affection, to which he has arrived, after a careful study, and collation of cases. It is thus, happily, devoid of much of the dryness incident to a descriptive detail of symptoms, diagnosis, prognosis and treatment, found in systematic works.

It is divided into eight lectures. The first and second lecture being devoted to the general etiology of bronchitis, and bronchitis arising from cold, and mechanical irritation; the third and fourth to bronchitis in its relation to gout; and the remaining ones to bronchitis in connection with emphysema and diseases of the heart.

It will strike many with surprise that the author devotes so little space to the consideration of exposure to cold as a cause of this affection. Cold, which is so universally regarded as a powerful and ever-acting factor in the production of bronchial inflammations, and other pulmonary lesions, he disposes of without much ceremony, as possessing but a modicum of etiological importance. He bases this view, not upon mere theoretical grounds, but upon what he regards as firm clinical data. In but five out of sixty-six cases, could he trace the bronchial trouble to the action of the cause mentioned. That cold produces bronchitis, is the exception, rather than the rule.

While Dr. Greenhow relates not a few cases resulting from mechanical causes, the great bulk of them are brought forward to demonstrate the very intricate relationship existing between the various forms of bronchial inflammation, and the gouty dyscrasia, and it is just in this connection that our author evinces great cogency of reasoning.

His arguments to establish so close a relationship between two such seemingly different pathological conditions, are not at all specious, but show such analytical tact, and such power of tracing effects back to

causes, that they seem to carry conviction with them, and we feel almost compelled to subscribe ourselves believers.

Since the history of medicine began, catarrhs have been said to arise from exposure to cold, vague as it is in its action. On the inquiry being made by sufferers from bronchitis, as to the cause of their trouble, practitioners are content with the answer that it arises from "taking cold." The same question has been asked, and the same answer been given fer generations back. *A cold*, and *a bronchitis*, have, in fact, become synonymous terms.

As has been remarked before, Dr. Greenhow is opposed to this exclusive view as to the causation of these affections; and his cases, with the deductions based thereon, indicate, if they indicate anything at all, that we must look a little further for it. The gouty dyscrasia, is, with him, a powerful factor in these causations. After all, may not other pulmonary inflammations, such as pneumonia and pleurisy, be the results of some profound diathetic or constitutional disorder? If such be the case, we may possibly explain the beneficial action of some of the therapeutic agents often brought to bear against them. The good effects of alkalies in acute bronchitis, and of the iodide of potassium in the chronic form, are proverbial. Instead of referring the action of these remedies to some vague alterative or defibrinizing influence, may we not attribute it to a directly antidotal or eliminative power?

Rheumatism is, also, mentioned as being in some manner connected with attacks of bronchitis, but not so frequently as gout. The latter affection, on account of its much greater frequency in England than this country, may play a very prominent part in its association with bronchitis, but can not be a very fruitful source of the affection here. Rheumatism, which prevails so largely in our conntry, to the exclusion of gout, may take the place of it, in its bronchitic tendencies.

In this connection, it is well to state that Dr. Greenhow is not altogether alone in his views as to the relationship existing between rheumatism, gout, and certain pulmonary affections; for Pollock, in his admirable monograph on the "Elements of Prognosis in Consumption," states distinctly as his opinion, that the tubercular, rheumatic and gouty diatheses are closely allied. This may, in a manner, explain the remarkable statement of our author, that the tubercular dycrasia engenders a hereditary tendency to bronchial inflammations, and that these, in their turn, may give rise to a tubercular taint. Gout and rheumatism, are, as it were, sandwiched in between. According to this, one generation may possess an organic weakness of the respira-

tory apparatus, evidenced by a bronchitis, which will transmit to a succeeding generation another organic weakness in the form of phthisis; gout and rheumatism being mere modifications of the same diathesis, but spending their force on different tissues.

The assertion that bronchitis engenders phthisis, and phthisis bronchitis, will not seem orthodox teaching to those authorities who believe in their mutually protective influence.

Practitioners, as a regular thing, are too apt to regard bronchitis in the light of a trivial affection. When patients with some chronic pulmonary disorder apply to them, it is very common to hear the medical adviser say: "You need not be alarmed, you only have a little bronchitis." It is not true that bronchitis is an affection which is to be treated lightly. Following in its train, and dependent on it as a cause, are many morbid conditions which tend slowly, but only too surely, to a fatal termination. We will merely mention emphysema, hypertrophy with valvular disease of the heart, disease of the liver and renal affections. To all of these, as resultants of bronchitis, Dr. Greenhow enforces attention.

The two lectures devoted to cardiac affections, develop the facts that bronchitis may stand in a causative relation to disease of the right side of the heart, and in relation of effect, to disease of the left side. Bronchitis in the one case being a cause of disease, and in the other, an effect.

The author's remarks upon emphysema are practical and instructive. After reviewing the theories of Laennec, Jenner and others, as to the causation and mechanism of emphysema, he clearly states his own. While he thinks it may arise, in some instances, from bronchitis, asthma, and other antecedent diseases, he regards it as oftenest due to an organic weakness of the lung tissue, dependent upon some constitutional or diathetic condition.

There is nothing particularly new in his selection of the special remedies for bronchitis. They grow naturally out of his peculiar views as to the pathological nature of the affection, being mainly tonic, antidotal and eliminative. The *tincture of larch*, which seems to be a favorite remedy with him, is efficacious, we suppose, like all the other terebinthinates, without the objection of its producing nausea and irritation of the stomach and bowels.

If the author but continues his investigations, we may hope that he will effect as much towards the elucidation of bronchitis as have

those of Herard and Corneil, Villemin, Niemeyer, Wilson Fox and others accomplished for its congener, pulmonary phthisis.

We close our notice of this little work, by stating that we have rarely experienced so much pleasure from reading any production as we have from this. To those who are especially interested in the study of this class of affections, and even to the general practitioner, we will say that its perusal will fully repay them. C. R.

THE USE OF THE LARYNGOSCOPE IN DISEASES OF THE THROAT, WITH AN ESSAY ON HOARSENESS, LOSS OF VOICE AND STRIDULOUS BREATHING, IN RELATION TO NERVO-MUSCULAR AFFECTIONS OF THE LARYNX.

BY MORELL MACKENZIE, M. D.,

London., M. R. C. P. Physician to the Hospital for Diseases of the Throat, etc. Second Edition, with additions, and a chapter on the Examination of the Nasal Passages, by J. Solis Cohen, M. D., author of "Inhalation; its Therapeutics and Practice," etc., pp. 289, with two lithographic plates and fifty-one illustrations on wood. Philadelphia: Lindsay & Blakiston, 1869. For sale by C. P. Wilder, Indianapolis; Robert Clarke & Co., Cincinnati. Price, $3.00.

The appearance in England of a second edition of Dr. Mackenzie's "Treatise on the Use of the Laryngoscope," within a comparatively short period after its reprint in this country, has required the American publishers to issue a new edition equally complete. This comes to us in the shape of a handsome volume, printed in large clear type, on fine paper, making its examination a pleasure, instead of a task for overworked eyes.

The favorable reception awarded to the first edition of this book, renders praise of it now a work of supererogation, therefore, we will simply call attention to the new matter contained in this edition. This consists of "Additions on the Use of the Laryngoscope," a report of several interesting cases, and a recent essay on "Hoarseness, Loss of Voice, and Stridulous Breathing, in relation to Nervo-Muscular Affections of the Larynx," by Dr. Mackenzie, and "Some more Explicit Instructions with regard to the Manipulation of Laryngeal Instruments," together with a description of some which are more readily procurable in this country than those described by Dr. Mackenzie, and which experience has proved most serviceable, "Additions on Aphonia," with illustrative cases, and a chapter on "Examination of the Nasal Passages," by the American editor, Dr. J. Solis Cohen, of Philadelphia.

There is now no division of sentiment among the intelligent members of the profession in relation to the valuable aid afforded by the "art of laryngoscopy," in the diagnosis and treatment of diseases of the larynx. To all who now practice, or would acquire this art, we most warmly recommend the work we have just examined.

J. R. W.

JOINED TWINS—THE OBSTETRICAL AND SURGICAL MANAGEMENT, WITH REMARKS.

BY A. B. COOK, A. M., M. D.,

Professor of the Principles and Practice of Surgery, Kentucky School of Medicine. Louisville, Ky., 1869. Pp. 26.

This pamphlet gives the history of the delivery of a case of joined twins, in the practice of E. C. Bright, of Eminence, Kentucky, in 1865, a description of the monstrosity after it was delivered, and the results of a *post-mortem* inspection of the dead bodies.

Some attention is given to the general consideration of human monstrosities, together with the rules which should guide the accoucheur in attendance on their delivery; and the brochure closes with a discussion of the condition of the Siamese Twins, and the propriety of their separation by surgical art, deciding pointedly against such an operation while the twins both have health and comfort. We do not join the author in his reasoning or conclusion about the Siamese Twins; but recommend the pamphlet as a valuable monograph on the subject of human monsters.

J. F. H.

MEDICAL COMMUNICATIONS, WITH THE PROCEEDINGS OF THE SEVENTY-SIXTH ANNUAL CONVENTION OF THE CONNECTICUT MEDICAL SOCIETY, HELD AT NEW HAVEN, MAY 27 AND 28, 1868.

New Haven: Published by the Society. Moses C. White, M. D., Secretary.

These communications, together with the transactions proper, make a handsome volume of two hundred and eight pages. The "annual address" of the president, Dr. C. Woodward, of Middletown, has for its subject, "our Organization, its Relations and Responsibilities." The distinctive characteristics of the founders of the society, the claims

the community has upon it, and its future improvement and advancement, are the topics discussed in this address, which contains more pith and value than similar addresses usually do.

Dr. H. A. Canington, of New Haven, contributes an article on the "Relation of Theory to Practice." A correct estimate of the value of theory to practice is made. The difference between receiving a theory "merely as a provisional statement or explanation, the truth of which remains to be established" by experiment or otherwise, and of taking the theory of this or that one as "the ultimate expression of truth," and thus becoming partisans instead of seekers, is clearly shown.

The author thinks "that one of the most encouraging signs of promise in the medical world is this, that schools and systems, theories and hypotheses, find so few heated, bigoted partisans; and that the profession, as a whole, stands so far above the narrowness of sectarianism."

The third article, on "Army Hygiene," is by Dr. R. Bartholow, of Cincinnati. To this essay was awarded the "Jewett" prize offered for the best essay on the question, "By what Hygienic Means may the Health of Armies be best Preserved?" This is a lengthy and very valuable paper. Dr. B. is familiar with his subject, and has done it and himself justice in this essay. The conclusions arrived at after a careful survey of the whole ground, are expressed in the following summary:

"1. The minimum age of the men composing an army, should be twenty-five. In addition to the ordinary requirements of recruiting regulations, the influence of diathesis and cachexias over the health and physical stamina, should be considered.

"2. In the training of recruits, the conditions of the military service should approach as nearly as possible, to those of civil life. As the mortality of this period is greatly in excess of the other periods of military life, special hygienic precautions should be taken as respects habitations, diet, clothing, exercise, amusements, etc.

"3. As the chief danger to the health of the soldier arises from crowd-poisoning, scorbutus, malaria, a morbific cause compounded of these, and from contagious and epidemic diseases, the sanitary regulations of armies should be especially directed to the avoidance of the evils of permanent camps and barracks; to the providing a varied and ample diet, to instituting the most approved measures of private and public hygiene, and to enforcing police laws against the spread of probable zymotic diseases."

The fourth article is the "Russell prize essay." This is also by Dr. Bartholow, and is on the "Therapeutical Uses and Abuses of Quinia and its Salts." We think that the majority of the profession will not be likely to accept as true all the conclusions arrived at in this essay; yet we believe that the best observers will endorse them.

The fifth paper is on the "Treatment of Paralysis by Hypodermic

Injections of Strychnine, with remarks on Infantile Palsy," by Dr. M. G. Echeverria, Superintendent of the Mahopac House for epileptics and paralytics, at Lake Mahopac, New York. This is a valuable and interesting paper, and gentlemen interested in the subject will do well to consult it.

The sixth paper is by Dr. S. G. Hubbard, of New Haven, and comprises "Observations, Ante-Mortem and Post-Mortem, upon the case of the late President Day." This paper contains a clear and concise description of an highly interesting and instructive case.

The Seventh paper is on the "Relation of Albuminuria to Puerperal Convulsions," by Dr. P. M. Hastings, of Hartford. This paper contains nothing new, and is mainly taken up with a report of cases, and a consideration of the treatment of puerperal enclampsia.

Dr. H. Pierpont, of New Haven, presents a paper describing a case of "Ichthyosis Sanriderma Spynosum," occurring in a girl ten years old. No new facts concerning the pathology of this rare disease are made known.

The last scientific paper in this volume is by Dr. E. F. Coates, and gives an account of an interesting case of "Traumatic Lesion of the Knee-Joint."

The remainder of the volume is taken up with biographical notices, reports of committees, proceedings, etc. J. R. W.

CORRESPONDENCE.

NEW YORK CITY, FEBRUARY 15, 1869.

DEAR JOURNAL: The annual report of the Metropolitan Board of Health, being their third report, has recently been published, and is a most interesting document. Our city has, fortunately, been visited with no epidemic diseases during the past year. The mortality among infants, however, has been exceedingly great, especially of those under one year of age. From one-fourth to one-half of the whole mortality for the year is to be found among children under one year old, and, in some parts of the city, eighty per cent. of the mortality occurs in the infant population. The city and county of New York show a total mortality for the year, of twenty-five thousand, four hundred and fifty-nine, and Brooklyn, nine thousand and fifteen deaths.

According to the Registrar, during the past forty years we have had no summer so hot, damp and unhealthful as was the last.

"A separate special history of deaths in tenement-houses is made up, week by week, in the Bureau of Vital Statistics, and the number and causes of deaths in every such house, constitute important elements in sanitary maps, which are prepared for the use of the Board and its officers, as well as for future reference and analysis. An improvement in the health and comfort of the tenement-house population, and a decrease in the rate of mortality, must continue to be the result of the constant inspection, by the officers of this board, of this class of dwellings, and of the thorough enforcement of the wise provisions of the tenement-house act."

The report, after disposing of the subject of markets, slaughter-houses, streets, returns of coroners, foundlings and nurseries, takes up the subject of public baths, which, in such a city as ours, can only be regarded as a great sanitary necessity. The experiment in other cities has been eminently successful. Public baths were first erected in Boston, in 1860, and in 1867, twelve were in operation, at which, during the summer, eight hundred and seven thousand, two hundred and one baths were given.

During the past year, over seven thousand patients were treated at Bellevue Hospital for various ailments, five thousand, eight hundred of whom were admitted to the wards of the hospital. The out-door poor department shows a large increase in the number of patients treated. Of this class of patients, ten thousand, one hundred and twelve were treated year before last, while twenty-five thousand, five hundred and fifty-seven were treated last year. This well shows the extension of the usefulness of the institution, as well as the growth of poverty. At this out-door relief department, which is intended for those whose diseases do not require the treatment afforded by a hospital, there are twenty consulting and twenty attending physicians and surgeons. "The cases treated and classified as follows: Diseases of the chest, digestive system, nervous system, urinary system, skin, eye and ear, women, children, orthopedic surgery, and general surgery. To each of these classes two physicians or surgeons are assigned. They attend at certain hours each day, and prescribe for those who may present themselves. The medicines are prepared by the apothecary of the institution, and are furnished gratuitously. Such patients as require rest and continuous attention, are transferred to the hospital of the department."

The usefulness of the Morgue is shown by the fact that one hundred and forty-nine bodies were brought there during the year, of whom seventy-eight were recognized by their friends. This year photographs will be taken of all bodies brought to the Morgue, and then, even after burial, they may be recognized by their friends, and taken possession of.

The Commissioners of Public Charities and Correction have purchased Heart's Island of the general government for seventy-five thousand dollars. It is intended to use it as a "potter's field." The buildings erected by the general government on the island, during the war, and which still remain, are said to have cost over one hundred thousand dollars.

The following figures of our great metropolis, recently published, may not be uninteresting to you of the great West:

The total number of persons united in marriage in the city in a year, is seventeen thousand; of births, thirty-one thousand; of deaths, twenty-three thousand, four hundred and forty-three; of dwelling houses, fifty-four thousand, three hundred and thirty-eight; of families, one hundred and fifty-five thousand, seven hundred and seven; there are nearly three families, on an average, to every dwelling; nearly fifteen persons to every dwelling. There are eighteen thousand, five hundred and eighty-two tenant houses, containing four hundred and eighty-six thousand persons; city taxes are twenty-four millions dollars a year; money spent in public amusements amounts to seven millions dollars a year; for the support of the public schools, three millions dollars; for police, two millions, six hundred thousand dollars. Seventeen thousand emigrants land per month at Castle Garden; there are four hundred and thirty churches, chapels and missions, with accommodations for three hundred thousand persons; the number of licensed drinking saloons is five thousand, two hundred and three. By actual count, the number of visits made to two hundred and twenty-three drinking saloons, during twenty-four hours, was found to be twenty-nine thousand, nine hundred and fifty. At this rate, the total visits made to five thousand, two hundred and three saloons amount to two hundred and fifty-three millions, seven hundred and eighty-one thousand, five hundred and twenty-eight a year. The amount of money received at the two hundred and twenty-three saloons named above, in a week, amounted to one hundred and forty-one dollars and fifty-three cents for each. At this rate, the total receipts of five thousand, two hundred and three saloons, for the year, would be thirty-eight

millions, two hundred and ninety-one thousand, seven hundred and ninety dollars and sixty-eight cents. The officers of the United States Revenue Department estimate the total amount of retail liquor sales to be sixty-eight millions dollars. The latest police reports state that there are five hundred and twenty-five houses of prostitution, ninety-nine houses of assignation, thirty-three saloons where waiter-girls attend, and two thousand and seventy public prostitutes.

Total number of arrests by the Metropolitan Police, for the year, eighty thousand, five hundred and thirty-two.

Arrests for crimes of violence, eighty thousand and sixty-two; commitments to the city prison, forty-seven thousand, six hundred and forty-six; lodgings furnished at public stations, one hundred and five thousand, four hundred and ten; lost children taken care of by the police, five thousand, nine hundred and seventy-nine.

Out-door poor relieved, twenty thousand, three hundred and ninety. In the prisons, hospitals, etc., under the care of the Commissioners of Public Charities and Correction, there were ninety thousand, eight hundred and fifteen persons relieved during the year.

A free course of lectures on Ophthalmology, is being given to physicians and medical students, on the first Saturday, and the second, third and fourth Tuesdays of each month, at 8 P. M., by Dr. John P. Garrish, at his Eye and Ear Infirmary, 65 West Thirty-fourth street, corner of Broadway. Daily clinics are also held there at 2 P. M.

Not being entirely satisfied with their present location down Broadway, in connection with the New York Hospital, the trustees of the University Medical College have been endeavoring, for some time back, to secure a proper locality in the upper part of the city for building a new medical college. They have at length succeeded in purchasing a lot opposite Bellevue Hospital, and intend erecting a fine edifice there, which will be ready to be occupied by the coming fall. This will be a fine move for the University, as it will then, on account of its proximity to Bellevue Hospital, be able to present to its students those hospital advantages that have made Bellevue Medical College so popular. The many friends of the good old university, the annals of which have been rendered ever illustrious by such names as Mott, Gross, Pattison, Dickson, Revere, Bartlett, Meredith Clymer, John T. Metcalfe and others, as teachers, and by its long array of distinguished graduates, who are each year adding new lustre to its name, will heartily rejoice at this projected change.

The *Medical Record* says: "We are pleased to learn that a strong

effort is being made to collect funds for the erection of a suitable building for the uses of the medical profession of this city. The initiative has been very properly taken by the Academy of Medicine, which has appointed a committee of ways and means, composed of its most responsible members, who have the power to solicit and collect funds, select a site, and erect the buildings suitable not only for present wants, but also the future exigencies of the profession. The immense utility of such a central organization as this must prove to be, if the design be carried out, will be acknowledged by every one interested, and can not fail to call forth a liberal pecuniary support."

A new "Medico-Forensic Society" has recently been organized in New York, the object being to render medical jurisprudence familiar to physicians and lawyers. Mock courts will be held, and cases regularly tried. Meetings are held on the first and third Wednesday evenings of each month. The following officers have been elected: John Beach, M. D., President; W. B. Putney and Wm. Gibson, Vice Presidents; W. J. Wright, M. D., Recording Secretary; C. C. Terry, M. D., Corresponing Secretary; Charles K. Briddon, Treasurer.

During last fall St. Luke's Hospital held its ninth anniversary. Last year one thousand and twenty-seven patients were treated, one hundred and seventy-two of whom were children. The deaths numbered one hundred and thirty-seven. Of these fifty were of scrofulous consumption, eleven of Bright's disease of the kidneys, and eight of cardiac disease. Other ailments caused the death of only from one to four persons each. Dr. Muhlenberg, the superintendent of the hospital, in a few remarks, said the title of St. Johnland was given to four hundred acres of land, five miles from Northport, L. I., purchased two years ago. It was independent of St. Luke's Hospital. A house had been built upon the spot by benevolent individuals, with a view of ultimately creating a home for aged and infirm men; but at present it would be devoted to children.

St. Luke's Hospital, situated on Fifty-fourth street, between Fifth and Sixth avenues, was incorporated in the year 1850, mainly through the efforts of the Rev. Dr. W. H. Muhlenberg, then pastor of the church of the Holy Communion, and at the present time pastor and superintendent of the hospital. It was not until May 13th, 1858, however, that the institution was ready for the reception of patients.

"The hospital building is placed on the northern part of a plat of two hundred feet wide, and four hundred feet long, leaving six hun-

dred feet for court yard. The principal front is on Fifty-fourth street, facing south, and extending east and west two hundred and eighty feet in length. The general plan of the edifice is an oblong parallelogram, with wings at each end, and a central chapel, flanked with towers. The elevations of the several fronts, even to the members of the cornices, are of square red brick." The wards of the hospital are one hundred and nine feet long, twenty-six feet wide, and fourteen feet high. Each bed has one thousand and ninety-two cubic feet of atmosphere. The great distinctive feature of the institution is the central chapel. This has accommodations for about four hundred persons, is eighty-four feet long, thirty-four feet wide, and forty feet high. Here religious services are regularly held.

There are four attending and consulting physicians, three attending and four consulting surgeons, a resident surgeon and physician and his assistant, an examining physician, and a pathological cabinet. The board, for those who are able to pay, is seven dollars per week for adults, and four dollars for children, for whom a special ward is appropriated. No contagious diseases are admitted. Many patients are maintained on charity beds, to endow one of which, costs three thousand dollars, or three hundred dollars annually. There are fifty-five charity beds in all. Although this hospital is under Episcopal auspices, still patients are admitted without regard to religious creed. This is truly one of our noblest charities.

Yours, very truly,

JAMES B. BURNET, M. D.

LETTER FROM DR. CATLIN.

T. PARVIN, M. D.—DEAR DOCTOR: My letter to you, published in the December number of your *Journal*, was so exclusively a statement of facts that I did not anticipate it could be disputed; I have just seen Dr. McElroy's letter, in your January number, attempting to ridicule and question my statements.

I did not attempt to give general instruction respecting the use of the hypodermic injection, or the doses of morphine to be used in different kinds of cases. I only stated a few cases and their happy results; though I remarked at the close of my letter, "It is perfectly safe when judiciously administered."

I have, as I wrote, used the hypodermic syringe, since 1860, in a great variety of cases, carrying my syringe with me as constantly as I do my lancet, and using it fifty times more frequently.

I do not remember more than one or two cases where the least unpleasant effect followed. My practice is to deal out a dose of morphine in powder, dissolve it in rain or distilled water. I often carry with me grain doses, carefully weighed, using the whole or such part as I find necessary. At other times, as in the case of vomiting in pregnancy, when I stated that *about* half a grain was used, I select the dose without weighing, but an experience of over forty years enables me to do it with great accuracy.

I purchase my morphine of Sisson & Butler, Hartford, Connecticut., some of the best druggists in the country, whose sales extend to the West as well as East. My patients were none of them opium eaters or drunkards.

In my letter of November 19, 1868, I write, page seven hundred and seventy-nine, in your *Journal:* "From that time I have treated every case in the same way, and they have been cured in ten or fifteen minutes." In my manuscript I say every *severe* case. The omission of this word I observed on first reading the printed copy, but did not think it necessary to request you to correct it in the next number. Indeed, I might have omitted the qualifying word in copying the article for the press.

The cases which I stated were all severe cases, where no judicious practitioner would have hesitated in giving, years ago, a grain of morphine, or two or three grains of opium, by the mouth.

Whatever may be said or written, the facts remain the same. My patients are relieved in ten minutes, asleep in twenty, are well the next day; suffer no inconvenience from secondary effects of morphine—(never having witnessed the slightest in cases of *cholera morbus.*)

Dr. McElroy's patient obtained partial relief in three miuntes, "but the lower extremities were still very painful. * * The sick stomach continued." "Before eight o'clock she was asleep," something less than one and a half hours after the injection, though, from the record, she was visited three days after this.

No amount of ridicule will alter the facts. They speak for themselves. With much respect, yours truly,

B. H. CATLIN, M. D.

MERIDEN, FEBRUARY 12, 1869.

EDITORIAL AND MEDICAL NEWS.

A DISTINGUISHED citizen of Indiana died at Indianapolis some two weeks since, a few hours after taking about one-half of a mixture containing eight ounces of brandy, twenty grains of quinine, and one ounce of tincture of gelseminum. The dose directed by the physician who prescribed this mixture was, a table-spoonful every two hours.

As to the condition of the party prescribed for, all our knowledge is derived—as are the statements above—from newspaper accounts of the event. According to one paper, he "had been suffering for several days from nervous prostration." According to another, "he had been ill for some weeks, and latterly had been drinking quite hard. It is stated that for four or five days he had not tasted solid food, subsisting entirely on intoxicating liquors."

We apprehend it is not assuming too much to say that this patient was laboring under *alcoholism*. Letting this be assumed, two or three questions are suggested. Was this patient in a condition to be trusted with any medicine powerful in its effects? Was he fit to be trusted by himself even? And knowing that alcoholism when fatal, generally is so from coma, asphyxia, syncope, or exhaustion, was gelseminum a suitable medicine in such a case? Here are statements of different authorities as to the action of this agent:

"From the accounts given by various authors of the effects of yellow-jasmine, it appears to be a nervous and arterial sedative, without nauseating or purgative properties, but sometimes causing diaphoresis, especially in febrile diseases. In moderate doses it produces agreeable sensations of languor, with muscular relaxation, so that the patient finds some difficulty in moving the eye-lids, and keeping the jaws closed. More largely taken, it occasions dizziness, dimness of vision, dilated pupil, general muscular debility, and universal prostration; reducing the frequency and force of the pulse, and the frequency of respiration, and producing insensibility to pain; but without stupor or delirium. After a short time, these symptoms pass off, leaving no unpleasant effects. It usually begins to act in half an hour, and ceases to act after one or two hours. It is, no doubt, capable of producing death in over doses."—*United States Dispensatory.*

*"Death has followed the employment of what was supposed the tincture of gelseminum, in a few instances, and further investigations are required to determine its probable cause, and whether this agent will produce any fatal

*Dr. John King, the author of the Dispensatory we quote, is not remarkable, as this extract shows, for the accuracy of his composition—his words indulge in a sort of promiscuous intercourse which must be annoying to any one trained up in the virtuous use of language. Observe the second sentence and tell us to what word the relative which refers; so, too, in the third sentence—the which is in trouble as to ownership—so far as grammar can guide us it refers to eyes, "and which gradually pass off in a few hours;" "fatal results in large medicinal doses" is so obviously an absurd expression that it needs no comment.

results in large medicinal doses. * * * Gelseminum is, undoubtedly, an unrivaled febrifuge, and which appears to be dependent upon its relaxing and antispasmodic properties. Whether it is a narcotic is not yet satisfactorily explained. * * * Its effects are clouded vision, double-sightedness, or even complete prostration, and inability to open the eyes, and which gradually pass off in a few hours, leaving the patient refreshed and completely restored. * * * If carried to such an extent that the patient can not open his eyes, the relaxation may be too great for the system to recover from, hence its use should cease as soon as the symptoms above named have been produced.

"The tincture is the form in which it is employed. The dose is from ten to fifty drops in a wine glass half full of water, to be repeated every two hours."—*American Dispensatory.*

"Possessed of narcotic properties to a very considerable degree," * * many employ the tincture of the root in fevers. It acts in a similar manner to digitalis and *V. viride*, with the addition of some narcotic property. It has to be used with caution on these accounts, and because it induces delirium in overdose."—*Resources of the Southern Fields and Forests, by Dr. Francis Peyre Porcher.*

However, without discussing these interrogatories, because there are details in reference to the death—how soon it occurred, what symptoms marked its approach, *et cetera*—and facts which a *post-mortem* examination that ought to have been made in the interests of medicine at least, would have discovered, which are wanting to us, we wish to make this positive and general assertion, that the administration of alcohol to a patient suffering with *alcoholism*, is wrong, both on scientific and moral grounds; and this position is taken without special reference to the case above mentioned. We imagine that hemlock is not often given for paraplegia, strychnia for tetanus, or ergot for excessive uterine contraction; and if alcoholic stimulants have been resorted to frequently in the treatment of the disease in question, it has been from erroneous views of its pathology, and probably the practice has been as successful in furnishing victims for the undertaker as has that which administered opium *larga manu* in the same disorder—each plan is fraught with incalculable mischief. We often think of the anecdote told by Dr. Theophilus Thomson, we believe, of an old lady upwards of eighty, who was suffering with fatal disease, and for the prolongation of whose life the doctor was urging the free administration of alcoholic stimulants, when she uttered the urgent request, "*Doctor, let me go home sober.*" And should we not permit our patients, when they must die, to go home sober—not drugged to utter stupor with opium, nor drunk with alcohol?

As to the pathology of *alcoholism*, some of us who are not very old can remember when we were taught that the disease arose from the withdrawal of an accustomed stimulant; but this teaching, with the

pernicious practice which was its natural sequence, has been exploded by the advance of modern science. Here is what we are taught by some of the best and most recent authorities:

"The essential nature of *delirium tremens* is associated with the loss of cerebral power, evinced especially in the want of control over thoughts, emotions, and muscular action, consequent on the direct influence of the alcoholic poison."—*Aitken, vol.* 1, *p.* 776.

"The pathology of alcoholism naturally divides itself into three portions. The morbid influence which the poison exerts is of three kinds. In the first place, it acts as a local irritant (when highly concentrated) upon the mucous membrane of the stomach, and of the alimentary canal generally; and in the second place, after absorption, it affects the rate of movement and the vitality of the blood, and as a consequence of this impairs the nutrition of every organ in the body. And, thirdly, it is clear that the nervous centres, independently of the ill effects on their nutrition of the blood-changes, have a certain chemical attraction for alcohol, which accordingly is found to accumulate in their tissues. * * The successful treatment of *delirium tremens*, in nine cases out of ten, depends on the regular and continuous supply of suitable nutriment, whereby the functions of the nervous system are supported during the struggle towards recovery."—*Reynolds' System of Medicine, vol. ii.*

"*Delirium tremens* is but the acute form of chronic alcoholism." * *

"Science has determined that the administration of stimulants and alcoholic drinks in this disease, is at once irrational and experimentally dangerous."—*Nouveau Dictionnaire de Medecine et de Chirurgie Pratiques, Tome premier. Alcoolisme.*

"The view of its pathology now prevalent is, that alcohol, a poison dangerous to life in large doses, is also cumulative taken habitually in small quantities. * * Formerly the treatment used to consist of supplying the usual stimulus; but, theoretically, it is clear that this is tantamount to adding coals to fire, and, practically, it has been shown that patients more rapidly recover under the use of nutriment."—*The Principles and Practice of Medicine, Prof. J. Hughes Bennett, M. D.*

We think the authorities adduced are ample to establish the general principle that alchohol is not a suitable agent to administer in alcoholism.

There are certain moral considerations which should enter into the discussion of this question, but which we have not space now to consider. If the poor wretches who have been narcotized with opium, alcoholized or chloroformed, because they had *delirium tremens*, were faithfully enumerated, we believe it could be shown that vastly more were killed than cured by such irrational treatment.

THE COMMENCEMENT exercises of the Medical College of Ohio will be held in the lower lecture room of the college building on Monday, the 1st of March, at eleven A. M., the valedictory to be delivered by Prof. James Graham, M. D., the degrees being conferred and an address delivered on behalf of the Board of Trustees, by Judge Dick-

son. The number of graduates will be between sixty and seventy. Next month the *Journal* will contain the list of questions asked the candidates for graduation—it will be remembered that this Institution has for some years pursued the plan of *written* instead of *oral* examinations—and also, we hope, Prof. Graham's address.

ARRANGEMENTS are being made, and will be completed in time to be announced in our April issue, for conveyance on some first class Mississippi steamer of those desiring to attend the meeting in New Orleans next May, of the American Medical Association. At present we can only announce that the *time* from Cairo to New Orleans will not exceed four days, and the *fare*, going and returning included, will not be more than thirty-five dollars. Our friend, Dr. Hibberd, has the matter in charge, and it could not be in better hands.

THE LATE Dr. Addison, (*A Collection of the Published Writings of the late Thos. Addison, M. D.*, Physician to Guy's Hospital, Sydenham Society's Publications, London, 1868), concluded an article *on the Diseases of Females connected with Uterine Irritation*, thus:

"But, gentlemen, if you really require an apology for detaining you so long, I find ample material for that apology in the lively interest which we must all feel in the comfort and happiness of the other sex, doomed as they are, both by the decrees of Providence and by human institutions, to drink deep of the bitter cup of suffering. Whatever may be *her* lot in this world, we, as men, must at least acknowledge that whilst Infinite power gave us being, Infinite mercy gave us woman."

This extract from a paper—(it was originally prepared as a clinical lecture—a paper that will especially delight the venerable Dr. Hodge, for so much of it is in correspondence with what he has taught in his own lectures and writings), we give partly as an answer to a criticism which was made by a most competent critic upon some of our own expressions as to the special interest and importance of the study of diseases of women.

THE BRITISH AND FOREIGN *Medico-Chirurgical Review*, January, 1869, is not at all complimentary in its notice of *Thomas on Diseases of Females:*

"Thomas' work on the diseases of women is simply a compilation. The surgery, illustrations as well as matter for the text, taken from Sims, the medicine and pathology from various well-known authors. Like all books of the kind, its real practical use is limited to giving the student some superficial information, acting as a kind of hand-post pointing out the direction which must be taken to arrive at real knowledge."

Now this is unjust. Dr. Thomas has written on many surgical diseases of women upon which Dr. Sims has never written a line, nor are his medicine and pathology exclusively derived from various well-known authors, and we must regard the book as an excellent compend, and, in some respects, in advance of any similar work from an American pen.

EXSECTION OF THE KNEE-JOINT, IN 1825.—(In the *Lancet*, January 8th, 1825, there is quite a racy sketch of the late Mr. Crampton given, and in the course of it the author refers in the severest terms to an operation performed by Mr. C., which is now established as perfectly judicious.)

He invariably performs the numerous experiments that are daily put forward in the world for well-known purposes, but which are very often nurtured in ignorance and propagated by credulity. While we profess ourselves the ardent admirers of rational experiment, we shall never countenance, by a concealment of our feelings, an innovation which would give one moment's pain to a fellow creature, without a well-grounded prospect of ameliorating his condition.

We happened to be present, some time back, at one of those scenes of scientific butchery at the Meath Hospital. The patient was a female; the complaint, if we recollect rightly, open scrofula of the knee-joint. A great concourse assembled to witness the operation: it was quite a *gala* day with the dissectors—a festival, seemingly, held in honor of the virtues of "*Steel.*" It was the first time, we believe, that the removal of the knee-joint was attempted here; we earnestly hope it will be the last. The operator, of course, accomplished his purpose with his usual dexterity. But could he have beheld, as we did, the contorted countenances of the spectators, the knife would have fallen from his hand, never to be resumed where it was not more imperiously indicated. To be present was indeed to be in torture. One man vented his feelings in a *wink;* a second in a *hem;* a third overcame his sympathies in a forced fit of laughter; a fourth put his fingers in his ears to shut out the wretch's screams; all, to be sure, admired, yet all disapproved; and before the performance was entirely finished, Colles cried out, in rather an audible tone, *"by J——s!"—drew the door after him, and vanished. We saw this poor creature a long time after, endeavoring to drag her limb with her, by means of sundry *wooden* contrivances. How much more preferable would amputation have been in this case? A wooden leg to a useless member, kept from falling asunder by bandages and splints. And, forsooth, this is called cleverness! admirable surgery! Very well, let it be called by whatever name the sanguinary desperadoes of the profession choose, but we shall never be cheated out of our judgment, or fear to expose such practice when it falls under our observation.

*Colles was as famous for this oath as a late President of the United States for "*By the Eternal*," or as a noted New York obstetrician is for "*By Jove.*"

It pains us to announce the death of Dr. William Hays, of Covington, Kentucky. Dr. H. had been a contributor to this journal, and he was one of its warm friends. Only a short time before his untimely death, we received a most kind and encouraging letter from him. Personal acquaintance with him, though not intimate, led us to appreciate him highly. We regret that the action of the Covington profession, in reference to their late associate, which ought to have been received ere this, has, so far, failed to reach us; we hope, however, it will appear in our next issue.

The New York *Medical Gazette*, after being in a state of suspended animation for several weeks, makes its appearance again, and is sprightly and vigorous as ever. We hope it will meet with liberal patronage.

Baron Anselm de Rothschild has given the sum of two hundred thousand florins for the erection of an hospital for Jews, to contain one hundred beds, in Vienna.

Mortality from Snake Bites in India.—It appears from the Oude Administration Report, that during the past year, one thousand, one hundred and twenty-seven persons died from the effects of snake bites in that province; and from the Central Provinces Administration Report, that one thousand, eight hundred and seventy-four deaths had occurred in them from the same cause, during the three preceding years.

The *Neue Presse* states that eleven men and three women died in Ickutsk, in 1867, all of whom were over one hundred years old; of these, six are said to have been over one hundred and ten, one being one hundred and twenty-six, and another one hundred and thirty-one years of age.

In Reference to the failure of the attack lately made on the faculty of Paris, by the Bishops, Ricord is said to have remarked that it was an evidence of *mitral insufficiency*.

Wanted—A few copies of the *Cincinnati Journal of Medicine*, for February, 1866, and of the *Western Journal* for April, 1868.

For Sale.—An order for an artificial limb.

We call attention to the advertisement of *Practice for Sale*—an excellent opportunity for a physician with a little capital and some experience.